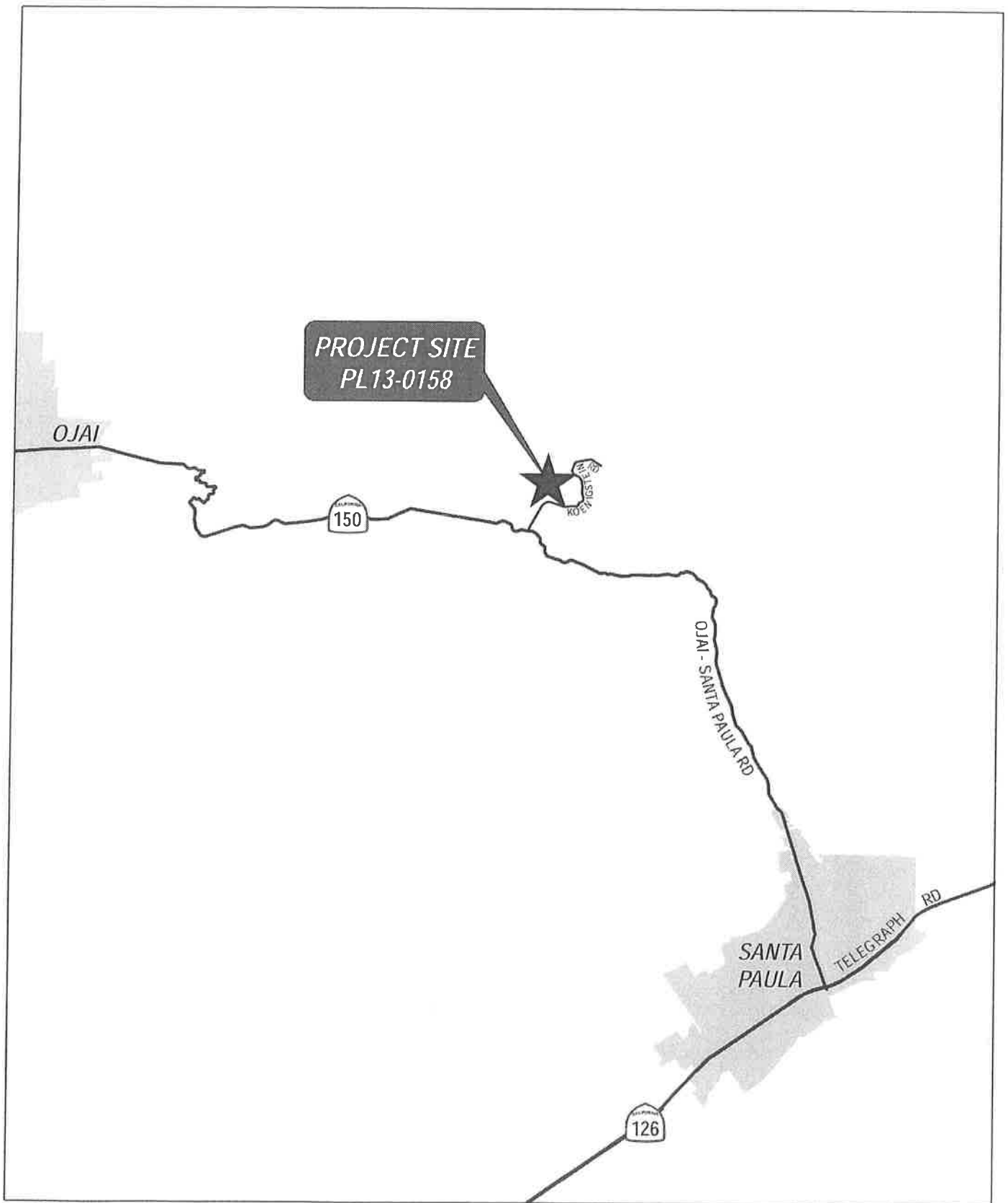


Proposed Final
Subsequent Environmental Impact Report
SCH # 2015021045

Appendix A

Figures:

1. Project location map
2. Aerial photograph
3. Map of Zoning and General Plan designations
4. Map of CUP 3543 boundary
5. Topographic map of CUP 3543 area
6. Map of CUP 3543 well and tank site
7. Related Projects Map



Ventura County
Resource Management Agency
Information Systems GIS Services
Map created on 04/22/2015

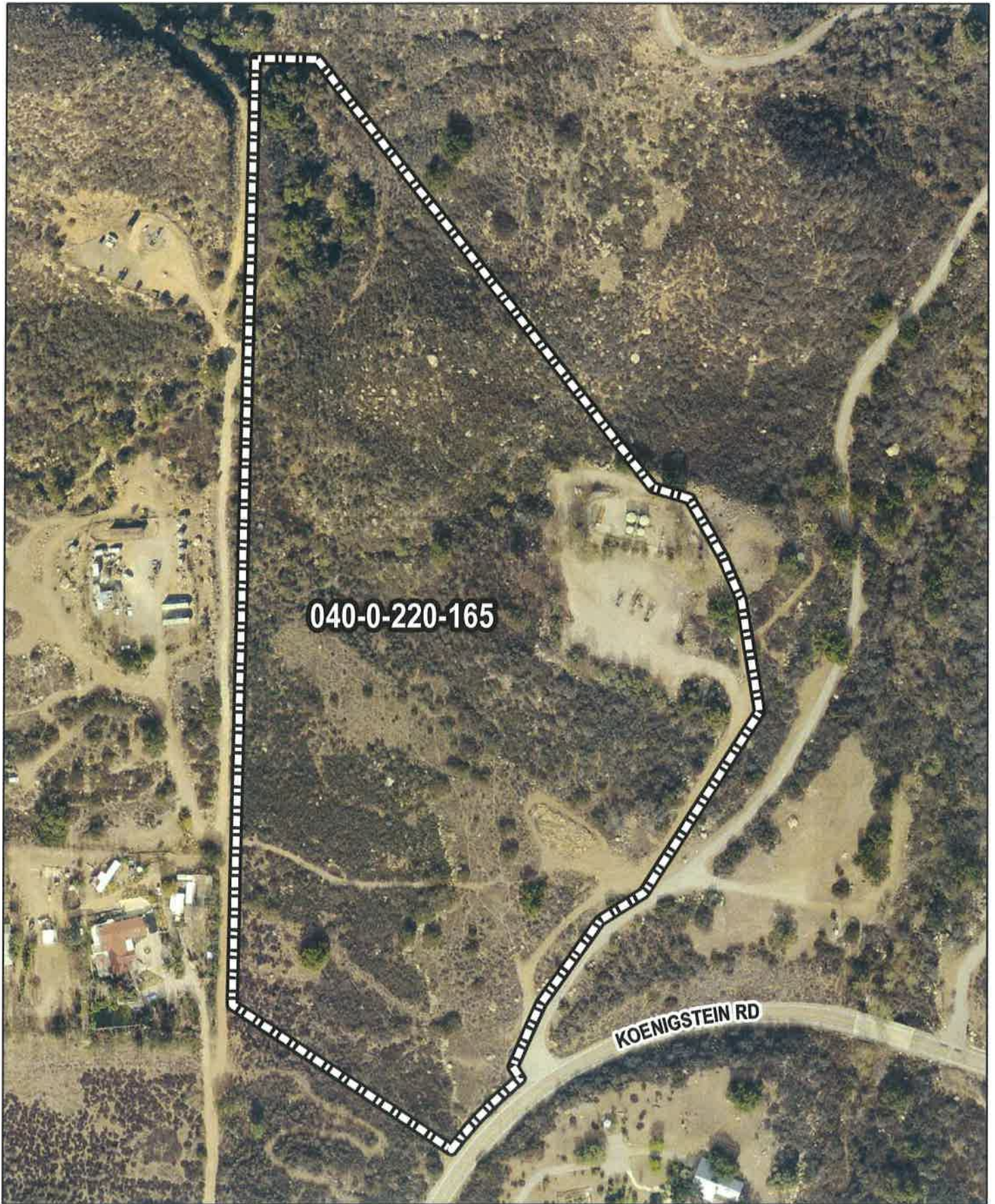


PL13-0158 Mirada Oil & Gas Location Map

0 3,000 6,000 12,000 Feet

Disclaimer: This map was created by the Ventura County Resource Management Agency Information Systems GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance thereon.





Ventura County
Resource Management Agency
Information Systems GIS Services
Map created on 02/12/2015
source: Pictometry®, February 2014

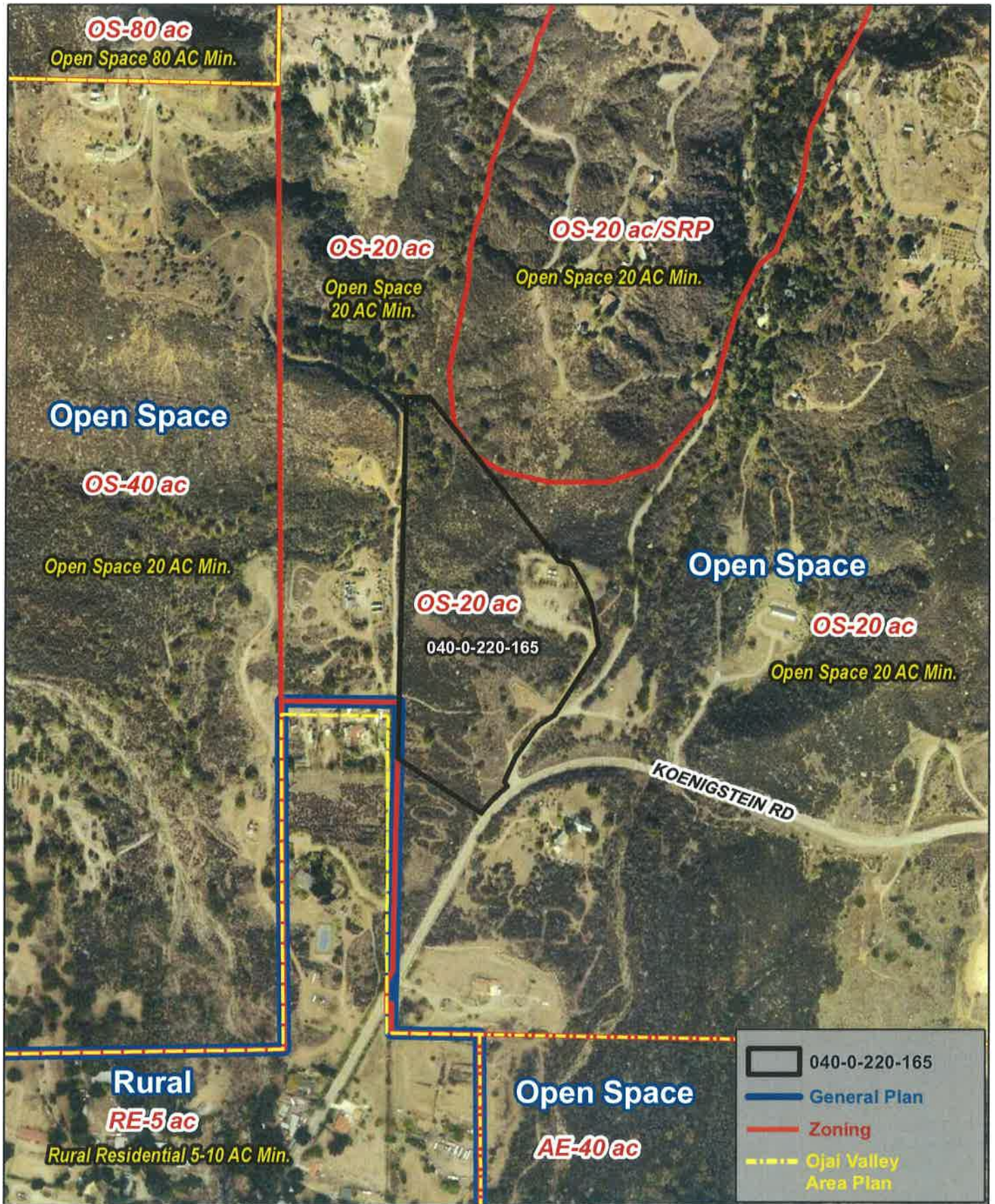


County of Ventura
Planning Director Hearing
PL13-0158
Aerial Location Map

0 75 150 300 Feet

Disclaimer: This map was created by the Ventura County Resource Management Agency Information Systems GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance therein.





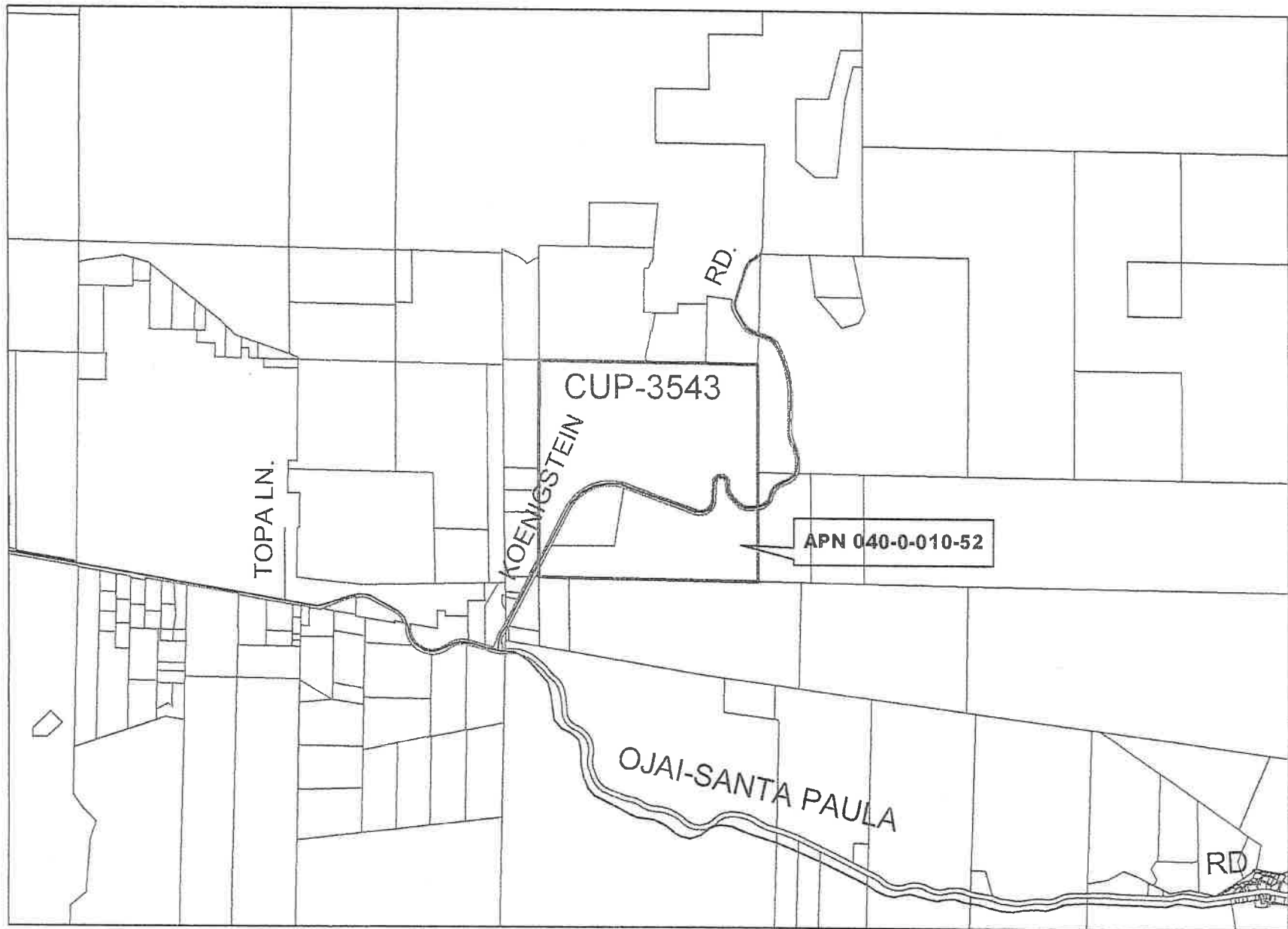
Ventura County
Resource Management Agency
Information Systems GIS Services
Map created on 02/12/2015
Source: Pictometry®, February 2014



County of Ventura
Planning Director Hearing
PL13-0158
Land Use Aerial Map

Disclaimer: this map was created by the Ventura County Resource Management Agency Information GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance therein.



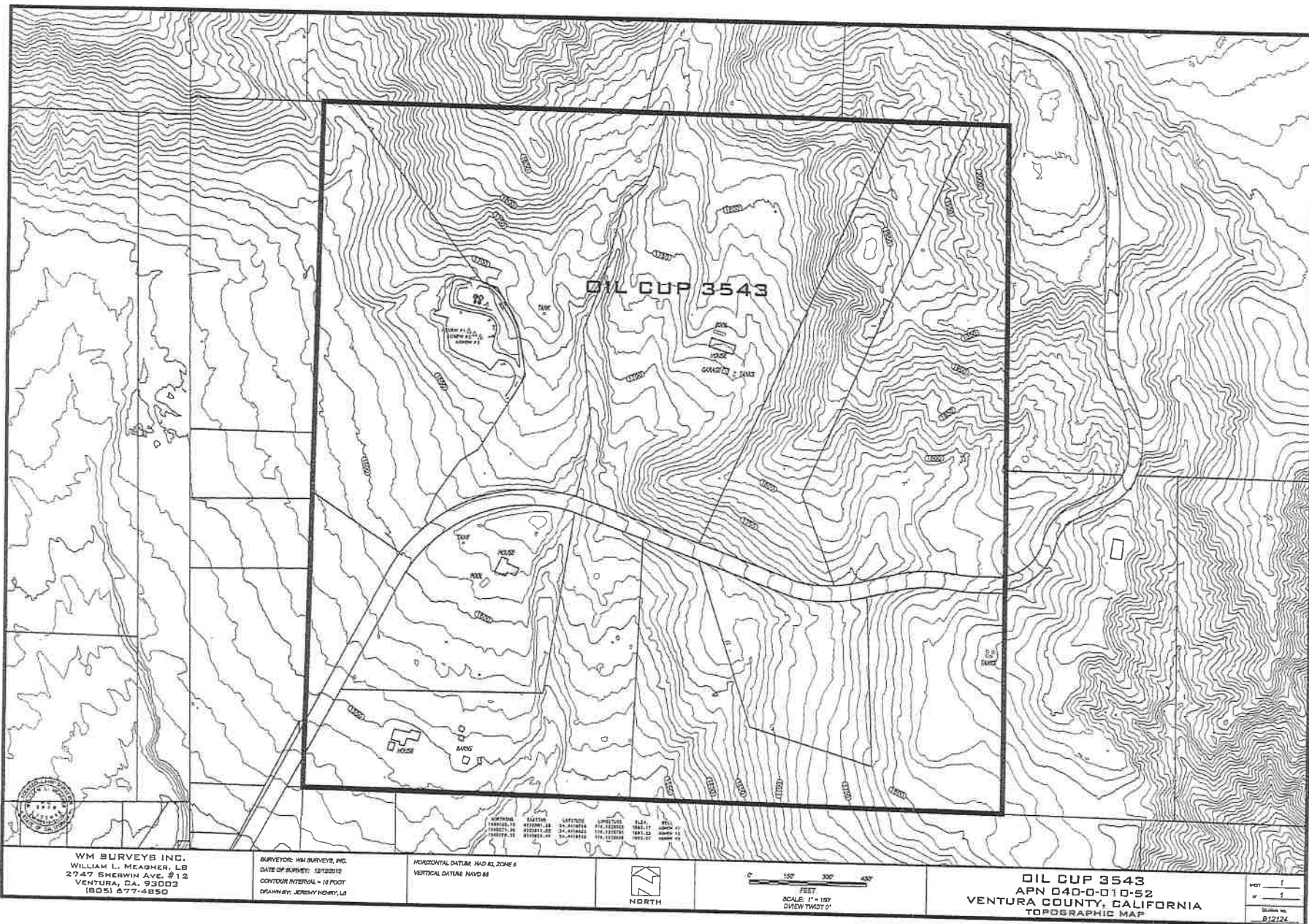


VENTURA COUNTY, CALIFORNIA
RESOURCE MANAGEMENT AGENCY
PLANNING DIVISION

BENTLEY SIMONSON, INC
CUP-3543
APN 040-0-010-52
SANTA PAULA
NOV-2002

0 1,750 3,500 7,000 Feet







WM SURVEYS INC.
WILLIAM L. MCADAMS, L.S.
2747 GILBERT AVE. #12
VENTURA, CA. 93003
(805) 677-0350

DATE OF SURVEY: 12/12/12
COMPUTATION BY: J. POOT
DRAWN BY: J. POOT

ADDITIONAL DATA: NONE
VERTICAL DATUM: NAVD 83



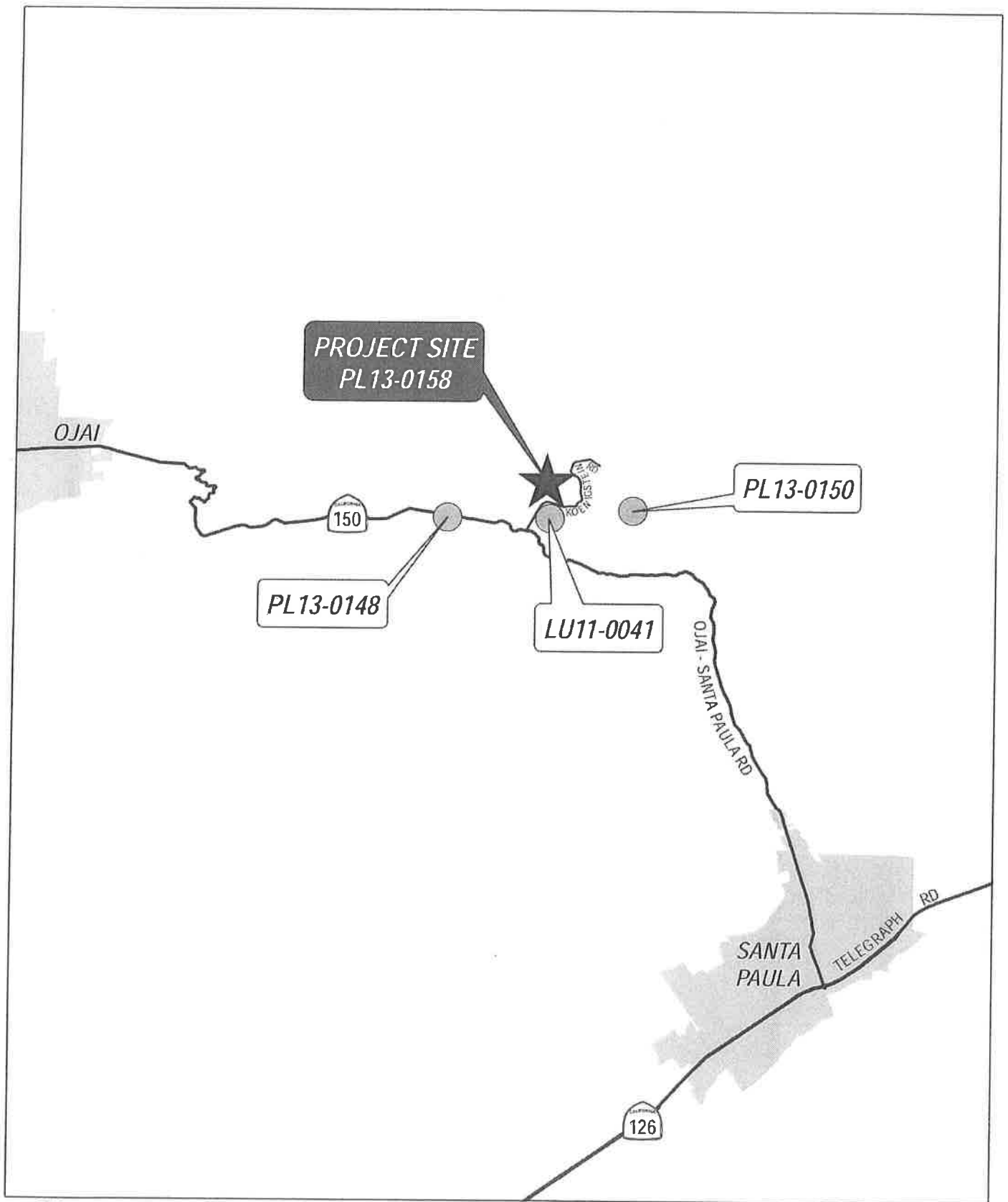
OIL CUP 3543
APN 040-0-220-16
VENTURA COUNTY, CALIFORNIA
TOPOGRAPHIC MAP
M1224

APN 040-0-220-16

POINT NO.	EASTING	NORTHING	COORDINATE
1	1035071.30	1035071.30	1035071.30
2	1035071.30	1035071.30	1035071.30
3	1035071.30	1035071.30	1035071.30
4	1035071.30	1035071.30	1035071.30
5	1035071.30	1035071.30	1035071.30
6	1035071.30	1035071.30	1035071.30
7	1035071.30	1035071.30	1035071.30
8	1035071.30	1035071.30	1035071.30
9	1035071.30	1035071.30	1035071.30
10	1035071.30	1035071.30	1035071.30
11	1035071.30	1035071.30	1035071.30
12	1035071.30	1035071.30	1035071.30
13	1035071.30	1035071.30	1035071.30
14	1035071.30	1035071.30	1035071.30
15	1035071.30	1035071.30	1035071.30
16	1035071.30	1035071.30	1035071.30
17	1035071.30	1035071.30	1035071.30
18	1035071.30	1035071.30	1035071.30
19	1035071.30	1035071.30	1035071.30
20	1035071.30	1035071.30	1035071.30
21	1035071.30	1035071.30	1035071.30
22	1035071.30	1035071.30	1035071.30
23	1035071.30	1035071.30	1035071.30
24	1035071.30	1035071.30	1035071.30
25	1035071.30	1035071.30	1035071.30
26	1035071.30	1035071.30	1035071.30
27	1035071.30	1035071.30	1035071.30
28	1035071.30	1035071.30	1035071.30
29	1035071.30	1035071.30	1035071.30
30	1035071.30	1035071.30	1035071.30
31	1035071.30	1035071.30	1035071.30
32	1035071.30	1035071.30	1035071.30
33	1035071.30	1035071.30	1035071.30
34	1035071.30	1035071.30	1035071.30
35	1035071.30	1035071.30	1035071.30
36	1035071.30	1035071.30	1035071.30
37	1035071.30	1035071.30	1035071.30
38	1035071.30	1035071.30	1035071.30
39	1035071.30	1035071.30	1035071.30
40	1035071.30	1035071.30	1035071.30
41	1035071.30	1035071.30	1035071.30
42	1035071.30	1035071.30	1035071.30
43	1035071.30	1035071.30	1035071.30
44	1035071.30	1035071.30	1035071.30
45	1035071.30	1035071.30	1035071.30
46	1035071.30	1035071.30	1035071.30
47	1035071.30	1035071.30	1035071.30
48	1035071.30	1035071.30	1035071.30
49	1035071.30	1035071.30	1035071.30
50	1035071.30	1035071.30	1035071.30
51	1035071.30	1035071.30	1035071.30
52	1035071.30	1035071.30	1035071.30
53	1035071.30	1035071.30	1035071.30
54	1035071.30	1035071.30	1035071.30
55	1035071.30	1035071.30	1035071.30
56	1035071.30	1035071.30	1035071.30
57	1035071.30	1035071.30	1035071.30
58	1035071.30	1035071.30	1035071.30
59	1035071.30	1035071.30	1035071.30
60	1035071.30	1035071.30	1035071.30
61	1035071.30	1035071.30	1035071.30
62	1035071.30	1035071.30	1035071.30
63	1035071.30	1035071.30	1035071.30
64	1035071.30	1035071.30	1035071.30
65	1035071.30	1035071.30	1035071.30
66	1035071.30	1035071.30	1035071.30
67	1035071.30	1035071.30	1035071.30
68	1035071.30	1035071.30	1035071.30
69	1035071.30	1035071.30	1035071.30
70	1035071.30	1035071.30	1035071.30
71	1035071.30	1035071.30	1035071.30
72	1035071.30	1035071.30	1035071.30
73	1035071.30	1035071.30	1035071.30
74	1035071.30	1035071.30	1035071.30
75	1035071.30	1035071.30	1035071.30
76	1035071.30	1035071.30	1035071.30
77	1035071.30	1035071.30	1035071.30
78	1035071.30	1035071.30	1035071.30
79	1035071.30	1035071.30	1035071.30
80	1035071.30	1035071.30	1035071.30
81	1035071.30	1035071.30	1035071.30
82	1035071.30	1035071.30	1035071.30
83	1035071.30	1035071.30	1035071.30
84	1035071.30	1035071.30	1035071.30
85	1035071.30	1035071.30	1035071.30
86	1035071.30	1035071.30	1035071.30
87	1035071.30	1035071.30	1035071.30
88	1035071.30	1035071.30	1035071.30
89	1035071.30	1035071.30	1035071.30
90	1035071.30	1035071.30	1035071.30
91	1035071.30	1035071.30	1035071.30
92	1035071.30	1035071.30	1035071.30
93	1035071.30	1035071.30	1035071.30
94	1035071.30	1035071.30	1035071.30
95	1035071.30	1035071.30	1035071.30
96	1035071.30	1035071.30	1035071.30
97	1035071.30	1035071.30	1035071.30
98	1035071.30	1035071.30	1035071.30
99	1035071.30	1035071.30	1035071.30
100	1035071.30	1035071.30	1035071.30



APN 040-0-220-17



Ventura County
Resource Management Agency
Information Systems GIS Services
Map created on 04/22/2015



PL13-0158 Mirada Oil & Gas Related Projects Map

0 2,000 6,000 12,000 Feet

Disclaimer: this map was created by the Ventura County Resource Management Agency Information Systems GIS, which is designed and operated solely for the convenience of the County and related public agencies. The County does not warrant the accuracy of this map and no decision involving a risk of economic loss or physical injury should be made in reliance therein.



Proposed Final
Subsequent Environmental Impact Report
SCH # 2015021045

Appendix B

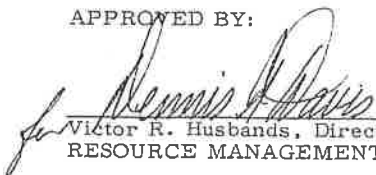
1983 Certified
Final Environmental Impact Report

VENTURA COUNTY
RESOURCE MANAGEMENT AGENCY

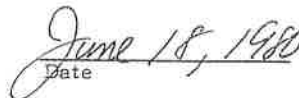
FINAL
ENVIRONMENTAL IMPACT REPORT
FOR
CONDITIONAL USE PERMIT 3543
PHOENIX WEST OIL AND GAS COMPANY

This report has been prepared pursuant to Division 13 of the Public Resources Code.

APPROVED BY:



Victor R. Husbands, Director
RESOURCE MANAGEMENT AGENCY



Date

TABLE OF CONTENTS

SECTION	PAGE
*I. <u>INTRODUCTION</u>	1
*II. <u>PROJECT DESCRIPTION</u>	5
APPLICANT	5
PROJECT TITLE	5
PROJECT LOCATION	5
PURPOSE OF PROJECT	5
LEGAL DESCRIPTION	5
ZONING	5
GENERAL PLAN	5
DESCRIPTION OF OPERATION	5
III. <u>ENVIRONMENTAL SETTING</u>	11
*IV. <u>ENVIRONMENTAL IMPACTS</u>	12
A. AIR QUALITY ASSESSMENT	12
B. GRADING ASSESSMENT	12
C. GEOLOGY ASSESSMENT	12
D. HYDROLOGY ASSESSMENT	15
E. TRAFFIC ASSESSMENT	16
F. PLANTLIFE ASSESSMENT	16
G. WILDLIFE ASSESSMENT	17
H. NOISE ASSESSMENT	18
I. ARCHAEOLOGICAL ASSESSMENT	18
J. FIRE PROTECTION	21
K. VISUAL ASSESSMENT	21
L. OTHER ENVIRONMENTAL CONSIDERATIONS	21
M. PIPELINE ASSESSMENT	22
V. <u>BENEFICIAL IMPACTS</u>	25
VI. <u>ANY "PROJECT-RELATED" ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED (SEE PAGES 28-54 FOR AN ANALYSIS OF CUMULATIVE IMPACTS)</u>	25
VII. <u>SUMMARY OF MITIGATION MEASURES PROPOSED TO MINIMIZE THE "PROJECT-RELATED" IMPACTS (SEE PAGES 28-54 FOR AN ANALYSIS OF MITIGATION OF CUMULATIVE IMPACTS)</u>	25
VIII. <u>ALTERNATIVES TO THE PROPOSED PROJECT</u>	27
IX. <u>THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY</u>	27
X. <u>ANY IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED</u>	27
XI. <u>GROWTH-INDUCING IMPACT OF THE PROPOSED PROJECT</u>	27
*XII. <u>CUMULATIVE ANALYSIS</u>	28
A. CUMULATIVE SETTING	28
B. APPROVED PROJECTS	33
C. PROPOSED PROJECTS	33
D. PROBABLE PROJECTS	33
E. CUMULATIVE AESTHETICS/VISUAL IMPACTS/MITIGATION	38
F. CUMULATIVE AIR QUALITY IMPACTS/MITIGATION	38
G. CUMULATIVE MITIGATION MEASURES	43

*Section amended.

Table of Contents - 1

TABLE OF CONTENTS - Continued

SECTION	PAGE
H. CUMULATIVE BIOLOGICAL IMPACTS/MITIGATION .	45
I. CUMULATIVE GROUNDWATER IMPACTS/ MITIGATION	46
J. CUMULATIVE TRAFFIC IMPACTS/MITIGATION . . .	47
K. CUMULATIVE NOISE IMPACTS/MITIGATION	50
L. CUMULATIVE IMPACTS	51
*XIII. <u>ORGANIZATIONS, AGENCIES, AND INDIVIDUALS CONSULTED FOR DATA INPUT</u>	55
*XIV. <u>APPENDICES</u>	
A. COMMENTS AND AGENCY RESPONSE TO DRAFT OF NOVEMBER 12, 1975	
B. STAFF REPORT TO BOARD OF SUPERVISORS	
C. MINUTES OF BOARD OF SUPERVISORS HEARING	
D. CUP-3543 PERMIT CONDITIONS ADOPTED BY THE VENTURA COUNTY BOARD OF SUPERVISORS ON NOVEMBER 22, 1977	
E. CUMULATIVE AIR QUALITY CALCULATIONS "HIGH FIND" PRODUCTION RATES	
F. CUMULATIVE AIR QUALITY CALCULATIONS "MEDIUM FIND" PRODUCTION RATES	
G. FLORAL AND FAUNAL SPECIES LISTS	
H. CUMULATIVE PROJECT-GENERATED TRAFFIC	
I. DRAFT DISTRIBUTION LIST FOR AMENDED EIR	
J. COMMENTS RECEIVED AND AGENCY RESPONSE	

* INTRODUCTION

This Environmental Impact Report (EIR) addresses the individual and cumulative environmental aspects of land use activities regulated by Conditional Use Permit No. CUP-3543. That CUP was issued and subsequently modified by the County of Ventura in a series of administrative actions between 1976 and 1979, which permitted the Phoenix West Oil and Gas Corporation to develop six (6) oil wells. At present there are two (2) wells under production on the project site. The project site is located off of Koenigstein Road in the Sisar Creek area of Upper Ojai Valley. A more thorough description of the project site is provided below.

This EIR is unique in that portions of it were originally developed in 1975, and certified as a complete EIR by the Ventura County Planning Commission and Board of Supervisors in 1976. However, the adequacy of the original EIR was successfully challenged in a series of court proceedings, resulting in an appellate court ruling that the original EIR did not fully meet the requirements of the California Environmental Quality Act (CEQA). The development of this EIR is in response to that court ruling (for reference, see the Court of Appeal of the State of California, Second Appellate District, Division Three, in *John Whitman, et al., vs. the Board of Supervisors of Ventura County*, 2nd Civil No. 52617). That appellate court remanded the matter to the Superior Court system to the Board of Supervisors for correction of the EIR. The Board reviewed the matter and on May 29, 1979, directed the Resource Management Agency to upgrade the original EIR in accordance with the direction of the appellate court, and to prepare findings supporting an earlier action of the Board regarding an appeal of certain conditions of the permit. In compliance with the Board's action, the Resource Management Agency contracted with Boyle Engineering Corporation for the preparation of this amended version of the EIR for the project.

The specific findings of the appellate court and the manner in which this amended EIR herein addresses those findings are as follows:

1. The court found that the original EIR inadequately assessed the cumulative impact of related projects in the region. The court therefore directed that the County prepare an adequate discussion of the cumulative impacts related to the project. To that effect, this EIR represents a compilation of the "individual impact assessments" provided in the original EIR, along with the "cumulative impact assessments" developed for the Upper Ojai Valley Oil and Gas Development Master EIR Study (EIR for CUP-ARGO Petroleum Corporation, Sisar Creek, 1980). In order to facilitate the reader in the review of this report, the cumulative impact analysis is herein separated by chapter from the text of the original EIR (refer to pages 2-20 for the text of the original EIR, and pages 20-47 for the cumulative analysis). Furthermore, all amended or added sections of this report are denoted by an asterisk in both the Table of Contents and the text.
2. The Court expressed an opinion that ideally all public agencies exercising authority over any natural resources which conceivably might be affected by the project should have been consulted during the environmental review of the project. The court, however, did not provide specific direction in this matter since, as it wrote, "...it is difficult, if not impossible, for this court to determine with any exactitude which public agencies have the right to exercise authority over resources which may be affected by Phoenix's project." The court left the handling of this matter to the County, suggesting that the County conduct further inquiry into the question of whether additional public agencies should be contacted with respect to the project. To this effect, the reader is referred to the amended references contained herein which pertain to public review. These include Section XIII - Organizations, Agencies, and Individuals Consulted For Data Input, and Section I of the Appendices - Draft Distribution List For Amended EIR.

3. The court found that the discussion of Alternatives To The Project in the original EIR was adequate. The court, did not require further development of this section of the report; therefore the original text of this section is herein provided.
4. The court found that the original EIR should have addressed itself to the environmental consequences associated with a pipeline. A pipeline was originally contemplated by the applicant for product transport if the wells should prove successful. The court, however, declined to provide direction on this matter other than to imply that environmental review of the pipeline would be necessary prior to its approval. To this effect, a pipeline environmental impact analysis has been developed and included as Section L. Pipeline Assessment, pages 22-24. Furthermore, page 6, Section II, Description of Operations is herein amended to more fully describe the pipeline project. These sections have been added since the permit conditions (specifically condition No. 30) require the installation of a pipeline for product transport once production exceeds 350 barrels of crude oil per day.
5. The Appendices Section is herein amended to include the adopted permit conditions, and cumulative assessment data calculations.

Project Description (Amended):

As noted above there are presently two producing wells on the CUP-3543 project site. The description of this project is best explained by its history, and for reference purposes that history is herein included.

(Original Permit) - On March 3, 1976, the Planning Commission approved CUP-3543 for the drilling of one exploratory oil well, subject to 58 conditions. As a result of an appeal of this decision by the applicant, the Board of Supervisors on April 27, 1976, modified 6 conditions of the permit. Subsequently, Mr. John Whitman, et al., initiated litigation in the Superior Court in June of 1976, in order to determine the adequacy of the related EIR. On May 10, 1977, the Superior Court found that the document was adequate, subsequently the plaintiff appealed the matter to the State District Court of Appeals. In absence of an injunction, the applicant initiated drilling operations for one well on September 26, 1976. In late October, the drilling rig was removed from the site and after testing the soil formations, the well went "on production" in December of 1976.

(Modified Permit) - On March 25, 1977, Phoenix West submitted an application for the modification of the permit to allow the additional on-site development of five oil wells. In reviewing the project, the Board of Supervisors on July 5, 1977, determined that the environmental effects of the project and the proposed modification were similar enough to warrant the same treatment in an EIR, in that the original EIR adequately covered the impacts of the project. Subsequent to that determination, on September 22, 1977, the Planning Commission approved the modification, subject to 63 conditions. Two of the conditions imposed by the Planning Commission were appealed by the applicant; on the other hand Mr. John Whitman appealed the Commission's decision in granting the permit. On November 22, 1977, the Board of Supervisors denied both appeals, granted the permit, and modified one condition. Subsequent to that approval, a second well was drilled which went into production in April of 1978.

(Additional Permit Proposal) - On July 1, 1977, Phoenix West filed a further application to modify the permit to allow the development of three additional drill sites (each having six oil wells per site) in the near vicinity of the original project site along Koenigstein Road. That application was subsequently withdrawn by the applicant relative to administrative matters. At this time, no applications are on file with the Planning Division for any further modifications of the permit.

Public Review

This amended EIR will undergo a full public review, including a required public hearing before the Ventura County Environmental Report Review Committee. After the close of that public review, the Planning Division will directly return to the Board of Supervisors, recommending the certification of the final version of this amended EIR. Also, in accordance with the appellate court's direction, as well as the May 29, 1979, direction of the Board of Supervisors, the Planning Division will return to the Board with recommended findings regarding an earlier decision by the Board to sustain an appeal of certain conditions of the original permit.

To facilitate review of this amended EIR, each of the following major sections that have been added is preceded by an asterisk and has been printed on gold-colored paper to highlight new information:

Page 6	<u>Description of Operations</u> (portion pertaining to the proposed pipeline)
Page 22	<u>Pipeline Assessment</u>
Pages 28-54	<u>Cumulative Analysis</u>
Page 56	<u>Organizations, Agencies, and Individuals Consulted for Data Input</u>
D-J	<u>Appendices</u> (EIR Distribution List, Permit Conditions, Cumulative Data Calculations, Floral / Faunal Species Lists, and Comments/Agency Responses).

INTRODUCTION

The applicant, Phoenix West Oil and Gas Corporation, has applied for Conditional Use Permit No. CUP-3543 to drill one exploratory well. The proposed location is in the Sisar area of the Upper Ojai Valley.

The purpose of this report is to identify and discuss the project's impact on the environment and explore possible measures which would mitigate adverse conditions.

*PROJECT DESCRIPTION

Applicant: Phoenix West Oil and Gas Corporation

Project Title: Phoenix West Oil and Gas Corporation -
Conditional Use Permit No. CUP-3543

Project Location: The subject project is located in the Sisar area of the Upper Ojai Valley, about 500 feet north of Koenigstein Road, about one half mile northeast of Highway 150 and approximately 9 miles east of the Ojai city limits (See Maps 1, 2 and 3).

Purpose of Project: The applicant is requesting a Conditional Use Permit to drill one exploratory oil well.

Legal Description: The site contains 1.5 acres and is designated as a portion of Assessor's Parcel 40-01-522 (144.5 acres).

Zoning: The project site is zoned "R-E-1Ac" (Rural Exclusive-One Acre Minimum Lot Size).

General Plan: The Open Space and Conservation Element of the Ventura County General Plan designates the project site as "Open Space." The project would be in conformance with this designation; however, the site's zoning is inconsistent with the "Open Space" designation.

Description of Operation:

The applicant is seeking Conditional Use Permit No. CUP-3543 in order to drill one exploratory well on 1.5 acres. The project would include one oil well site (200' x 200'), an access road approximately one-fourth mile in length and parking areas.

The applicant states that portable oil well drilling equipment would be installed as well as temporary drilling rig lighting on self-contained electrical generating equipment. The fuel for the drilling operations would be diesel oil. Water would be obtained from an existing private well in the area. During drilling operations an estimated 50 barrels per day of non-toxic drilling waste would be contained in 2 steel tanks and one open sump. Removal of the wastes would be to an approved dump site. The project would generate approximately 20 vehicular visits per day; approximately 17 of the vehicles would be automobiles and 3 would be small to medium sized trucks. It is estimated that drilling operations would take from 30 to 90 days.

If the well is successful, production equipment, 2 storage tanks and 1 wash (dehydration) tank would be placed on the site. All products would be transported from the well sites by a pipeline. Approximately 1 oil field truck per day would be temporarily utilized to transport the oil from the site until pipeline is constructed. It is estimated that 2 visits per day would be required to maintain the facilities after the pipeline is constructed.

If the well is unsuccessful, the site would be abandoned after 40 to 60 days and all equipment and materials employed in the drilling would be removed. The applicant states the site's topography would be restored to its original condition.

*Description of Operation (Amended):

Since 1975, two producing wells have been developed by Phoenix West Oil and Gas Corporation. Currently, present production under CUP-3543 is 35 barrels per day. Maximum production was about 130 barrels per day. If, however, a production rate of at least 350 barrels of oil per day is achieved, all products would be transported from the well site by a pipeline constructed in accordance with all applicable state/county laws, rules, and regulations.* Permits regulating the development and use of the proposed pipeline would be required from the following responsible agencies: Caltrans, Ventura County Fire Prevention Bureau, California Department of Fish and Game, and the Ventura County Flood Control District. According to the project applicant's representative, foreseeable future production rates (for all lands covered by CUP-3543) would not exceed 1,000 barrels of oil per day. In this instance, pipeline use would be 10 percent to 15 percent of the time (or a maximum of 3.5 hours per day) during normal production operations.

The proposed pipeline would be approximately 4,000 feet in length and have a 3-inch diameter. Pipeline placement would be both above and below ground as a function of terrain conditions. Its probable route would be as shown on Map 4, ultimately connecting with the Atlantic-Richfield Oil Corporation (ARCO) pipeline as shown. This 6-inch-diameter line is owned by ARCO and originates at the ARCO oil-processing facility to the south of Highway 150/Sisar Road intersection and proceeds easterly to Fillmore. The pipeline operator, Four Corners Pipe Line Company, reports that the average daily pumping capacity is presently about 7,600 barrels of oil per day. The present peak daily pumping capacity is estimated at 11,200 barrels per day. Four Corners Pipe Line Company has indicated that the pipeline capacity may be expandable to 20,000 barrels per day with additional pumping capacity, however, an engineering feasibility study would be necessary to confirm this possibility. Additional details concerning the capacity of the ARCO pipeline are given in the Cumulative Analysis starting on page 28 of this EIR.

From a qualitative standpoint, the ARCO pipeline appears to be of sufficient size to accommodate the maximum conceivable CUP-3543 production rate of 1,000 barrels per day. However, an engineering feasibility study would be required to determine if additional pumping capacity would have to be added to accommodate this quantity of oil. One thousand barrels per day would represent 5 percent of 20,000 barrels per day potential capacity or about 9 percent of the present maximum daily pumping capacity of 11,200 barrels per day.**

According to the project applicant's representative, that portion of the pipeline crossing Sisar Creek would be buried in the existing roadbed built by Argo Petroleum which crosses Sisar Creek on culverts (see Map 4). Alternatively, a suspension bridge could be built to support that portion of the pipeline as it crosses Sisar Creek. In this case, the suspension bridge would probably consist of two 10-foot-high "A" frames with a cable anchored behind and strapped to the pipe to raise it above the creekbed and prevent sagging.

*Review Condition Numbers 30 and 32 of permit, Appendix D.

**For additional information, see pages 30-31, bottom of page 33, and top of page 37.

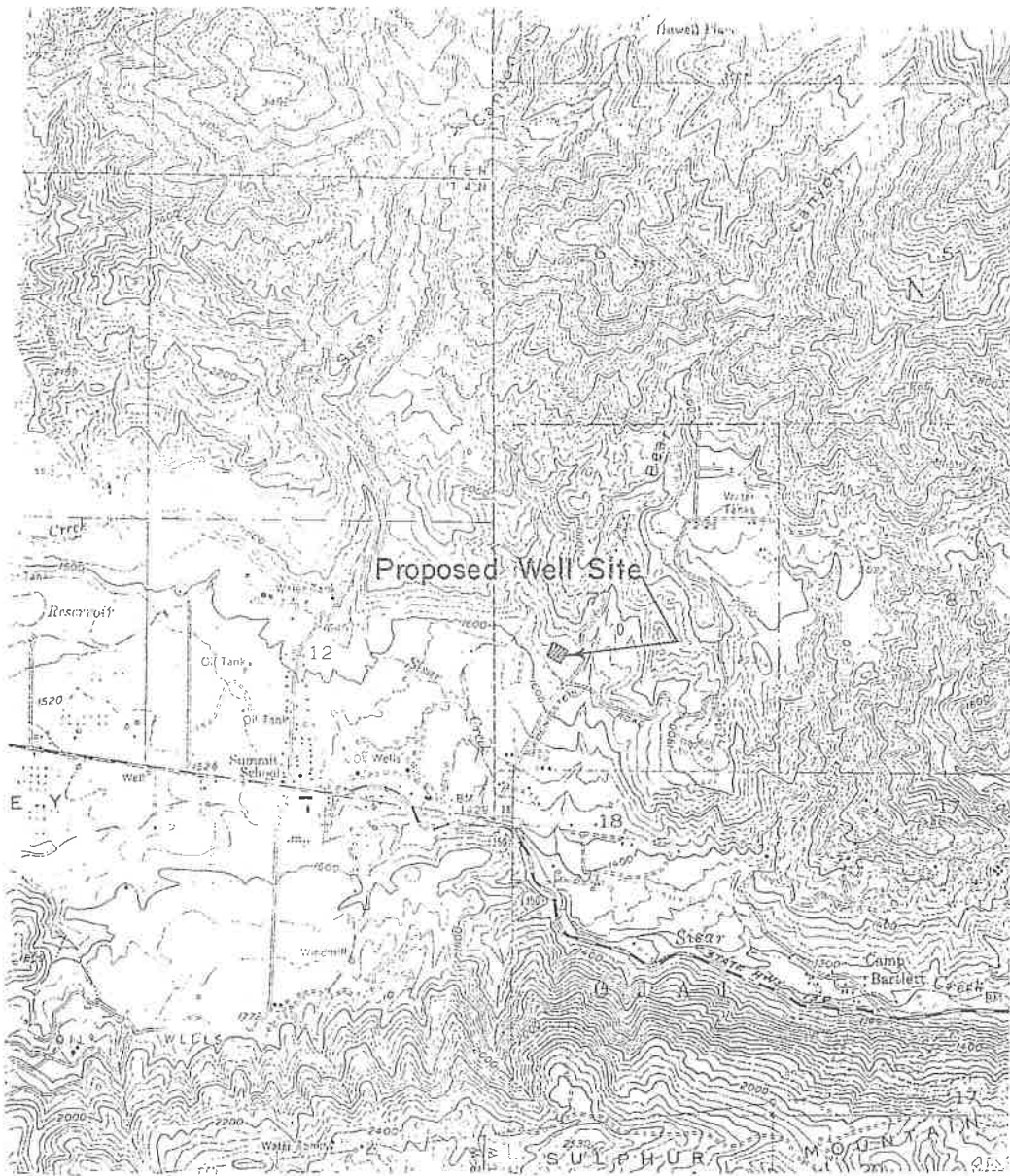


COUNTY OF VENTURA

MAP 1

CUP-3543

VENTURA COUNTY PLANNING DIVISION

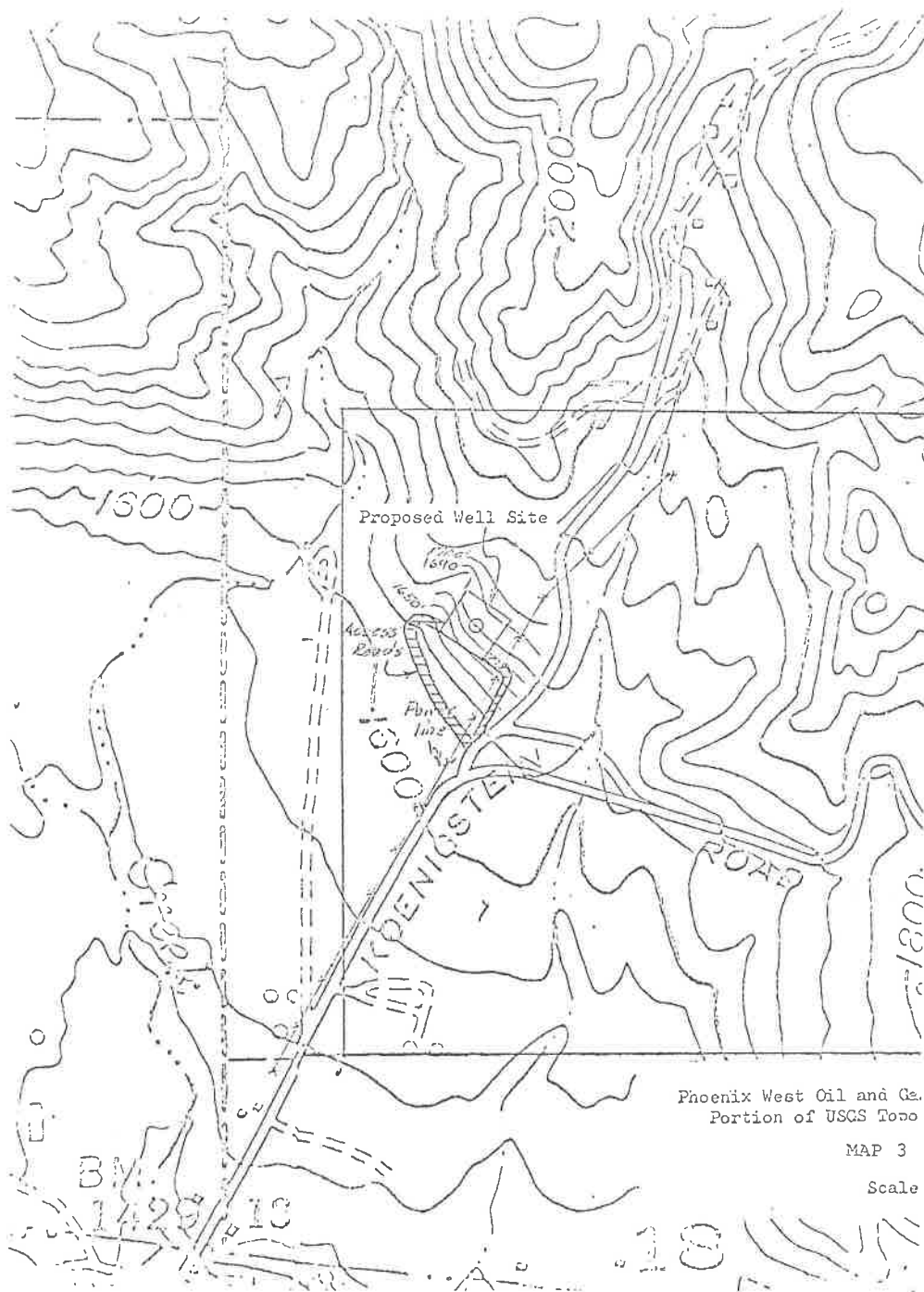


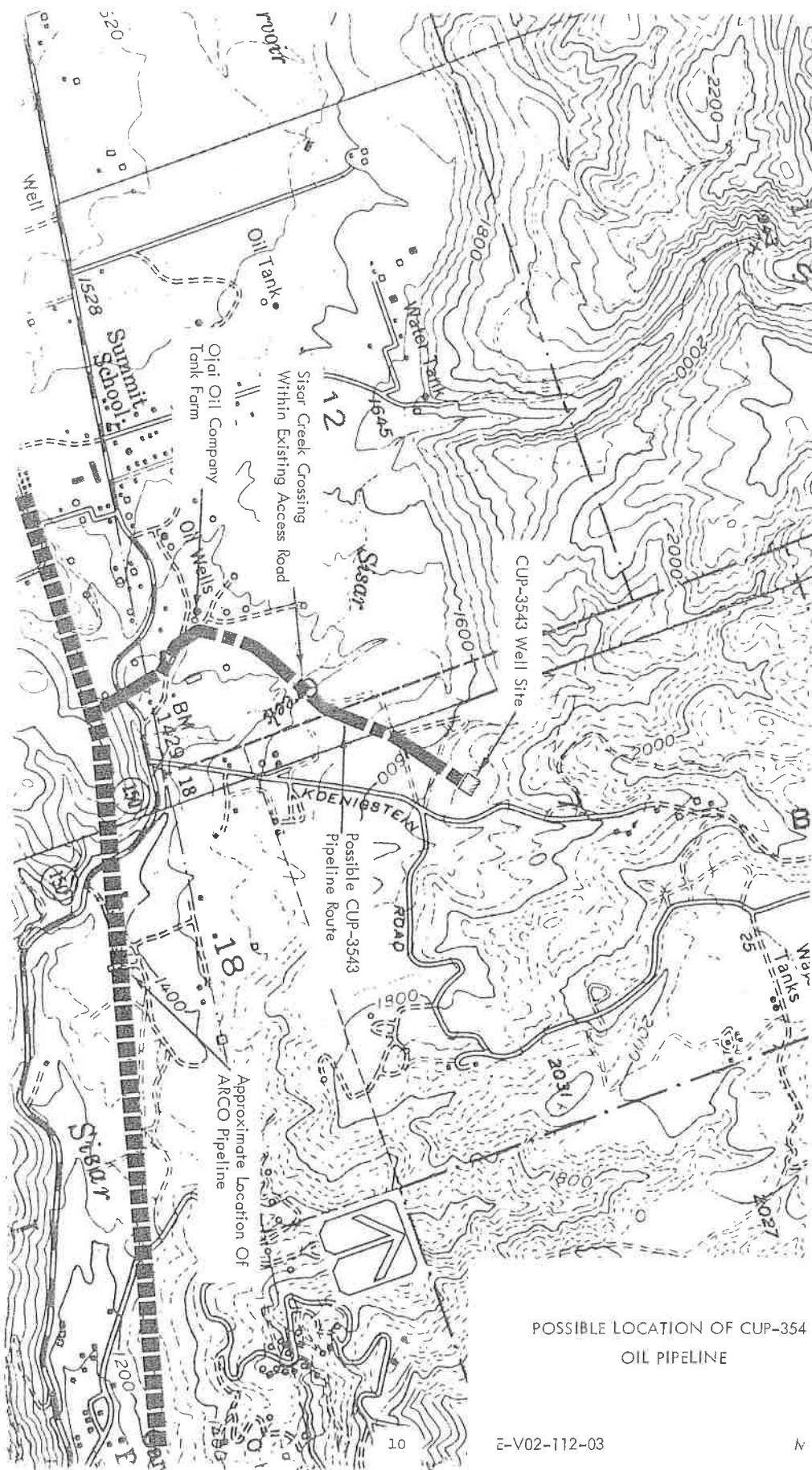
Ventura County
Environmental
Resource
Agency
Planning Division

CUP- 3543



MAP 2





POSSIBLE LOCATION OF CUP-354
OIL PIPELINE

E-V02-112-03

N

ENVIRONMENTAL SETTING

The project site contains approximately 1.5 acres which are currently undeveloped. Surrounding land uses include scattered residences approximately one-fourth mile to the north and limited oil and gas operations to the south, east and west. A hill separates the project site and the residences to the north. The site is approximately one-half mile south of the Los Padres National Forest boundary line.

The site is zoned "R-E-1Ac," and areas to the south and west are similarly zoned. Parcels to the north and east are zoned "R-E-1Ac" and "O-S-40Ac" (Open Space-Forty Acre Minimum Lot Size).

Topography on the site is characterized by hilly terrain with slopes ranging from 10 to 40 per cent. The site is presently in an undisturbed mature chaparral plant community. Although the surrounding area contains the uses cited above, it is predominantly in an undisturbed natural state. Bear Canyon and Bear Creek are approximately 500 feet east and Sisar Creek is approximately 2000 feet west and 4000 feet south of the proposed well site. The project site is a wildlife habitat.

Access to the site is via Koenigstein Road and a proposed on-site access road.

The site is in an area which is "very likely to contain archaeological sites" according to UCLA studies, and it is also in an extreme fire hazard area.

The project site is located in the Upper Ojai Valley which is characterized as a rural residential and agricultural community. The area's population is approximately 320 persons. Access to the Valley is either from Ojai or Santa Paula via State Route 150, a rural, two lane road.

Other oil related projects in the area which are pending approval or have been recently approved and not constructed include:

Transworld Oil Company (CUP-3538) for an oil transfer station located at State Route 150 and the access road to the Silverthread Oil Field, approximately 3.25 miles southeast of the project; and

Argo Petroleum (CUP-3344) for four additional development wells on the Ferndale Ranch which is located 3.75 miles southeast of the subject site.

*ENVIRONMENTAL IMPACTS

Air Quality Assessment¹

The drilling operation would require approximately 400 gallons of diesel fuel per day, according to the applicant. Emission factors for stationary diesel sources (Environmental Protection Agency publication #AP-42) follow:

Reactive Hydrocarbons = 37.5 lbs/1000 gal. fuel burned
NO_x = 469 lbs/1000 gal. fuel burned

Daily emissions follows:

Reactive Hydrocarbons 400 gal.
 1000 gal. x 37.5 lbs. = .008 tons
 2000 lbs/tons

NO_x 400 gal.
 1000 gal. x 469 lbs. = .094 tons
 2000 lbs/ton

Impact: The project would result in a 0.016 per cent increase in reactive hydrocarbons and a 0.1 per cent increase in NO_x emissions countywide. These emissions, in addition to some associated with vehicle miles traveled by project vehicles, would have a slight impact on the County's oxidant problem.

Grading Assessment²

The applicant indicates that approximately 8,000 cubic yards of dirt would be excavated to create the well site and road and that excavated material would be used as fill or retained for abandonment of site purposes. (See Proposed Drill Site Plan, page 8).

Impact: Any extensive site grading may result in deposition of loose fill which may be subject to erosion. In addition, site runoff during rainfall could result in considerable transport and deposition of soil onto Koenigstein Road.

Mitigating Measures: The applicant indicates that all runoff water would be confined to the drill site area or on the access road through the construction of a dike on the site and that the fill and road would be compacted. The applicant proposed to landscape the site if the well is productive.

Staff Evaluation: The Public Works Agency indicates that additional information such as a grading plan would be necessary to evaluate the effectiveness of the proposed mitigating measures. Additional erosion control measures could include landscaping and/or paving channels and/or roadways with non-erodible materials.

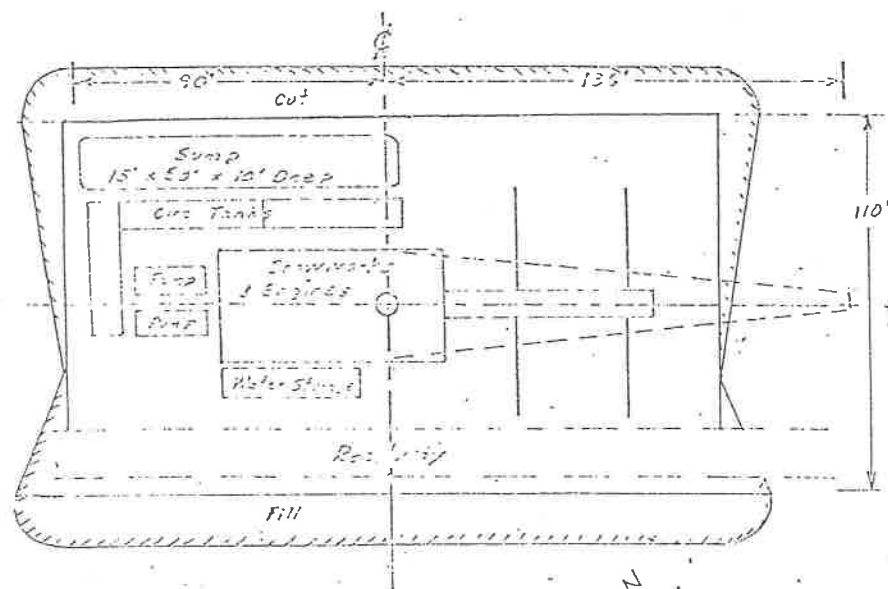
Geology Assessment

The project site is underlain by an undetermined thickness, perhaps several hundred feet of coarse Terrace Deposits consisting primarily of firm silt, sand, gravel and rock fragments to large boulder-size. These materials can be highly permeable, i.e., transmit fluids easily. The Coldwater Formation consisting of hard, relatively impermeable, sandstone directly underlies the Terrace Deposits. The vertical thickness of this formation and other of similar character beneath the site may be several thousand feet.

Additional general information and area extent of formations and faults can be obtained by reference to the State Division of Mines and Geology, Preliminary Report 14 "Geology and Mineral Resources Study of Southern Ventura County."

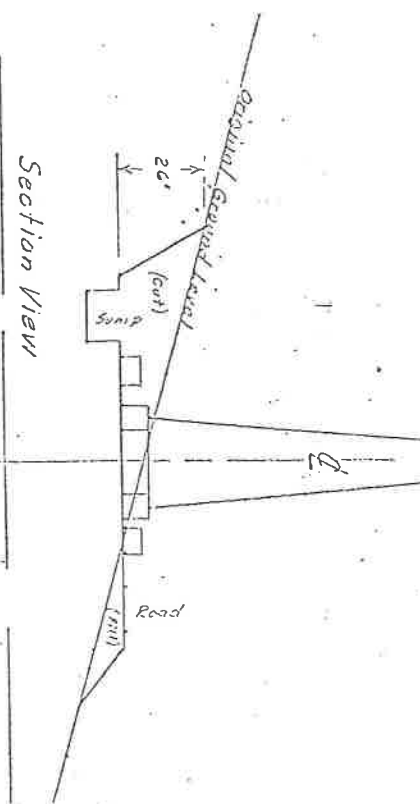
¹ Prepared by Ventura County Air Pollution Control District, September 25, 1975.

² Memoranda, A. P. Stokes to V. R. Husbands, Subject: CUP-3543, September 22 and October 8, 1975.



Plan View

Scale 1" = 20'



Phoenix West Oil & Gas Corp.

Proposed Drill Site Plan

June, 1975

R.L.

Impact: Loss of drilling or other fluids into permeable terrace deposits or other permeable earth materials could occur unless precautions are implemented during drilling operations. Degradation of local ground water could result from such losses.

Mitigating Measures: This well will be drilled in accordance with requirements of the California Division of Oil and Gas which requires annular sealing and testing of sealing to the base of fresh-water reservoir which should provide adequate protection of adjacent fresh-water supplies.³

Division 3 of the Public Resource Code outlines provisions for protection of ground water. The pertinent sections follow:

Sec. 3106. The State Oil and Gas Supervisors shall so supervise the drilling, operation, maintenance, and abandonment of wells as to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil and gas deposits from infiltrating water and other causes; loss of oil, gas, or reservoir energy, and damage to underground and surface waters suitable for irrigation of domestic purposes by the infiltration of, or the addition of, detrimental substances, by reason of the drilling, operation, maintenance, or abandonment of wells.

Sec. 3107. A district deputy in each district, designated by the supervisor, shall collect all necessary information regarding the oil and gas wells in the district, with a view to determining the presence and source of water in the oil sands and the location and extent of strata bearing water suitable for irrigation or domestic purposes that might be affected. He shall prepare maps and other accessories necessary to determine the presence and source of water in the oil sands and the location and extent of strata bearing water suitable for irrigation or domestic purposes or surface water suitable for such purposes. This work shall be done with the view of advising the operators as to the best means of protecting the oil and gas sands and the water-bearing strata and surface water, and with a view to aiding the supervisor in ordering tests or repair work at wells. All this data shall be kept on file in the office of the district deputy of the respective district.

Sec. 3210. The owner or operator of any well shall keep, or cause to be kept, a careful and accurate log, core record, and history of the drilling of the well.

Sec. 3211. The log shall show the character and depth of the formation passed through or encountered in the drilling of the well, and particularly the location and depth of waterbearing strata, together with the character of water encountered from time to time, so far as ascertained, whether or not the water was shut off, and if so at what point. The log shall show completely the amounts, kinds, and size of casing used, the depth at which oil-bearing strata are encountered, the depth and character of such strata, and whether all water overlying and underlying such oil-bearing strata was successfully and permanently shut off so as to prevent the percolation or penetration of water into such oil-bearing strata; and whether strata bearing water that might be suitable for irrigation or domestic purposes are properly protected from the infiltration or addition of detrimental substances from the well.

Sec. 3220. The owner or operator of any well on lands producing or reasonably presumed to contain oil or gas shall properly case it with water-tight and adequate metal casing, in accordance with methods approved by the supervisor or the district deputy, and shall, under his direction, shut off all water overlying and underlying oil-bearing or gas-bearing strata and prevent any water from penetrating such strata. The owner or operator shall also use every effort and endeavor to prevent damage to life, health, property, and natural resources; to shut out detrimental substances from strata containing water suitable for irrigation or domestic purposes and from surface water suitable for such purposes, and to prevent the infiltration of detrimental substances into such strata and into such surface water.

Sec. 3221. Whenever it appears to the supervisor that water from any well is penetrating oil-bearing or gas-bearing strata or that detrimental substances are infiltrating into underground or surface water suitable for irrigation or domestic purposes, he may order a shut-off test and designate a day upon which the test shall be held. The order shall be in writing and served upon the owner or operator of the well at least ten days prior to the day designated for the test. Upon receipt of the order, the owner or operator shall hold the test in the manner and at the time prescribed.

Sec. 3224. The supervisor shall order such tests or remedial work as in his judgment are necessary to prevent damage to life, health, property, and natural resources; to protect oil and gas deposits from damage by underground water, or to prevent the escape of water into underground formations, or to prevent the infiltration of detrimental substances, into underground or surface water suitable for irrigation or domestic purposes, to the best interests of the neighboring property owners and the public. The order shall be in writing, signed by the supervisor.

Sec. 3228. Before abandoning any well in accordance with methods approved by the supervisor or the district deputy, and under this direction, the owner or operator shall shut off and exclude all water from entering oil-bearing or gas-bearing strata encountered in the well and shall use every effort and endeavor to protect any underground or surface water suitable for irrigation or domestic purposes from the infiltration or addition of any detrimental substances.

Hydrology Assessment⁴

Small-scale geologic maps indicate that the proposed drilling site is underlain by terrace deposits and older marine sediments. The terrace deposits generally are quite permeable and can transmit surface water downward. The older marine formations are generally considered nonwater-bearing; however, numerous wells about one-half mile north of the project site produce limited amounts of fresh water from these types of rocks. Replenishment to these older marine rocks is probably through fracture zones.

Impact: Drilling fluids within the proposed sump may be quite saline. Since preliminary information indicates that downward migration to apparently fresh water bearing zones exist, groundwater degradation could occur by lateral movement southerly to Sisar Creek and possibly northerly by movement through the Coldwater sandstone.

Staff Recommended Mitigation Measures: The sump should be lined with impervious material to prevent ground water degradation.

Traffic Assessment⁵

Access to the site is via State Route 150 to Koenigstein Road. State Route 150 is a 24 foot wide paved road with graded shoulders. The current volume is 3000 average daily traffic (ADT) and the average speed is 45 mph. There are curves on State Route 150 both east and west of Koenigstein Road. Koenigstein Road is a 14 foot wide paved road with graded dirt shoulders. The road is in average condition. The current volume is approximately 50 ADT with no viable estimate of capacity available due to the surface width and seasonal variation of weather conditions. This road currently carries oil field related traffic. Access via Koenigstein Road is marginal with respect to the road width, the structural section, and the junction with State Route 150. There has been one recorded accident at the intersection of State Route 150 and Koenigstein Road during the last 12 months. This accident involved a car and a pickup; one driver was driving under the influence of alcohol.

The project would result in a traffic volume of 40 ADT during the drilling stage. If the well is successful, the traffic volume would be approximately 4 ADT after the pipeline is constructed for removal of oil from the site. Large truck-trailer equipment would be used at the beginning and end of the drilling phase of the project to move drilling equipment on and off the site. This activity would be limited to 3 or 4 large vehicles.

Impact: Both Bridge #326 on Koenigstein Road and the road itself are adequate to carry heavy equipment. Since the road is inadequate to accommodate two passing trucks, one truck would be required to pull over to the shoulder. This condition would create an inconvenience; however, it would not be characterized as unsafe due to the small volume of traffic currently occurring on the road.

The movement of large vehicles at the intersection of State Route 150 and Koenigstein Road could create unsafe conditions.

Mitigating Measures: The applicant proposes that the movements of large vehicles at the intersection of State Route 150 and Koenigstein Road be mitigated by the use of traffic control personnel furnished by the Sheriff's Department.

Staff Evaluation: The Public Works Agency indicates that the control of traffic is the responsibility of the applicant, not the Sheriff or California Highway Patrol, as required by a County Encroachment Permit for oversized/overweight loads. Flagmen should be required for movements of large vehicles at the intersection.

Plantlife Assessment⁶

The proposed drilling site is presently in an undisturbed mature chaparral plant community. Although the surrounding area contains some rural home sites and limited oil field operations, it is predominantly in an undisturbed natural state. The site lies near the edge of Los Padres National Forest, and as such, is part of a much larger wildlife habitat.

⁵

Memoranda, A. P. Stokes to V. R. Husbands, Subject: CUP-3543, September 22, 1975 and October 30, 1975.

⁶

Op. Cit., Memorandum, A. P. Stokes to V. R. Husbands, September 22, 1975.

The existing flora is extremely dense with chamise being the dominant plant species. Other significant species on the site include Laurel Leafed Sumac, Wild Buckwheat, Sage, Yucca, Scrub Oak, Elderberry, Toyon, Squaw Bush and Poison Oak.⁷

A significant riparian plant community (Bear Canyon) exists approximately 500' east of the site. This community contains Sycamore, Willow, White Alder, Cat Tail and Mule Fat. This community and the presence of water there enhances the significance of the site as a wildlife habitat.

Impact: The excavation for the drill site area (200' x 200') and the access road would result in the removal of native vegetation.

Wildlife Assessment⁸

The project site is an excellent wildlife habitat. The significance of the site as a wildlife habitat is enhanced by the site's association with the live stream, riparian habitat of Bear Canyon and its association with the Los Padres National Forest to the north. The site's isolation and dense vegetation also contribute to its significance as a wildlife habitat.

The total number of wildlife species actually observed was low. This was mostly due to the air temperature which exceeded 100 degrees during the field research. The following species were identified by observation or physical evidence, (i.e., scat, tracks): deer, coyote, scrub jay, titmouse, bushtit, wren, yellow-bellied sapsucker and the black headed grosbeak.

The total number of species actually using or residing at the site is undoubtedly very large. The site is likely visited or residence for large mammals such as black bear, mountain lion, gray fox, raccoon, bob cat and the long-tailed weasel. Small mammals likely found here would be bats, chipmunk, rabbits, gophers, mice and skunk.⁹

The site is a suitable habitat for approximately 50 bird species including those observed. The site is a suitable habitat for approximately 13 species of snakes and lizards. The site is a suitable habitat for a great number of invertebrate species.

No rare or endangered wildlife species were observed at this site. The site is within the flying range of the California Condor but is not a likely nesting or food source area.

Impact: Removal of the vegetation for the proposed drilling site would have a substantial adverse impact on wildlife. This impact would extend beyond the actual drill site due to increased noise levels and the presence of human activity.

The sump would not be a significant hazard to wildlife for the following reasons: the sump would be utilized for drilling mud only; and the drilling operation would operate 24 hours per day which would deter wildlife from entering the area.

If the well is unproductive, the sump would be covered. If the well is productive, the sump would remain for a period of time. Since the well site would not be attended 24 hours a day, the sump may prove hazardous to wildlife and trap mammals as large as deer.

7

A detailed list of on site flora is available in the Ventura County Flood Control District Office.

8

A detailed list of wildlife of this area is available in the Ventura County Flood Control District Office.

9

Memorandum, A. P. Stokes to V. R. Husbands, September 22, 1975.

Mitigating Measures: The Ventura County Ordinance Code requires that the sump shall be enclosed by a wire fence of a wire mesh type with a maximum of 2 inches by 4 inches opening and said fence shall be secured to steel posts not less than 5 feet in height above the ground and said posts shall have 45 degree arms attached to top of posts with 3 strands of barb wire attached thereto. This measure would prevent people as well as wildlife from entering the sump.

Noise Assessment¹⁰

Noise measurements were taken in the project area by the Ventura County Environmental Health Division (See Map 5). The existing ambient noise levels ranged between 29 and 35 dB(A). Peak noise levels reached 73 and 44 dB(A) at locations 1 and 2, respectively. These levels were associated with traffic on State Route 150.

Table 1 indicates the typical noise levels associated with various types of residential communities. The ambient noise level at all the locations measured falls below the levels indicated for a quiet suburban residential community.

Impact: Drilling would occur 24 hours per day for a 30 to 90 day period. The applicant estimates that the drilling equipment noise would be 109 dB(A) at the source. Since the projected noise level is an estimate, actual noise levels could be lesser or greater.

If the noise level at the unattenuated diesel is 109 dB(A), the noise level one-half mile away could be as high as 45 to 51 dB(A) and three-fourths mile away could be as high as 39 to 45 dB(A). These noise levels are typical of Urban and Normal Suburban Residential communities, respectively. Residential areas located at location 2 on Map 5 and in the Summit area west of Koenigstein Road are approximately one-half and three-fourths mile from the project site, respectively. The project could increase the ambient noise level at location 2 by as much as 11 to 17 dB(A). Rancho Del Oso, located approximately one-fourth mile north of the project, would be unaffected by the project noise which would be attenuated by a hill located between the project and the Ranch.

Mitigating Measures: The applicants indicate that efforts would be undertaken to attenuate the noise if complaints are received during the drilling phase of the project.

Archaeological Assessment¹¹

The Ventura County Archaeological Society indicates that there are no recorded archaeological sites in the immediate area of the proposed exploratory well drilling site and that this area has never been surveyed to determine the nature of its archaeological resources. The site is in close proximity to the Upper Ojai area which contains numerous recorded archaeological sites. In addition, the site is located on a ridge flanked by an intermittent stream both to the east and west. These factors indicate that the site is a highly probable location of aboriginal occupation in the past.

The Archaeological Society recommends that a qualified archaeologist be engaged to make a surface determination of all the area that will be involved in the well drilling, including all excavation, access roads, pipelines, firebreaks, sump and foundations.

It further recommends that during the construction, if subsurface archaeological sites are encountered, all work should stop in the immediate area and a qualified local archaeologist called in to evaluate and make recommendations.

¹⁰

Memorandum, Irv Johnson to Janet Lyders, Subject: Phoenix West Oil and Gas EIR, September 25, 1974.

¹¹

Letter from Lyle A. Kenney, Coordinator, Ventura County Archaeological Society to Janet Lyders, Subject: EIR for CUP-3543, September 11, 1975.

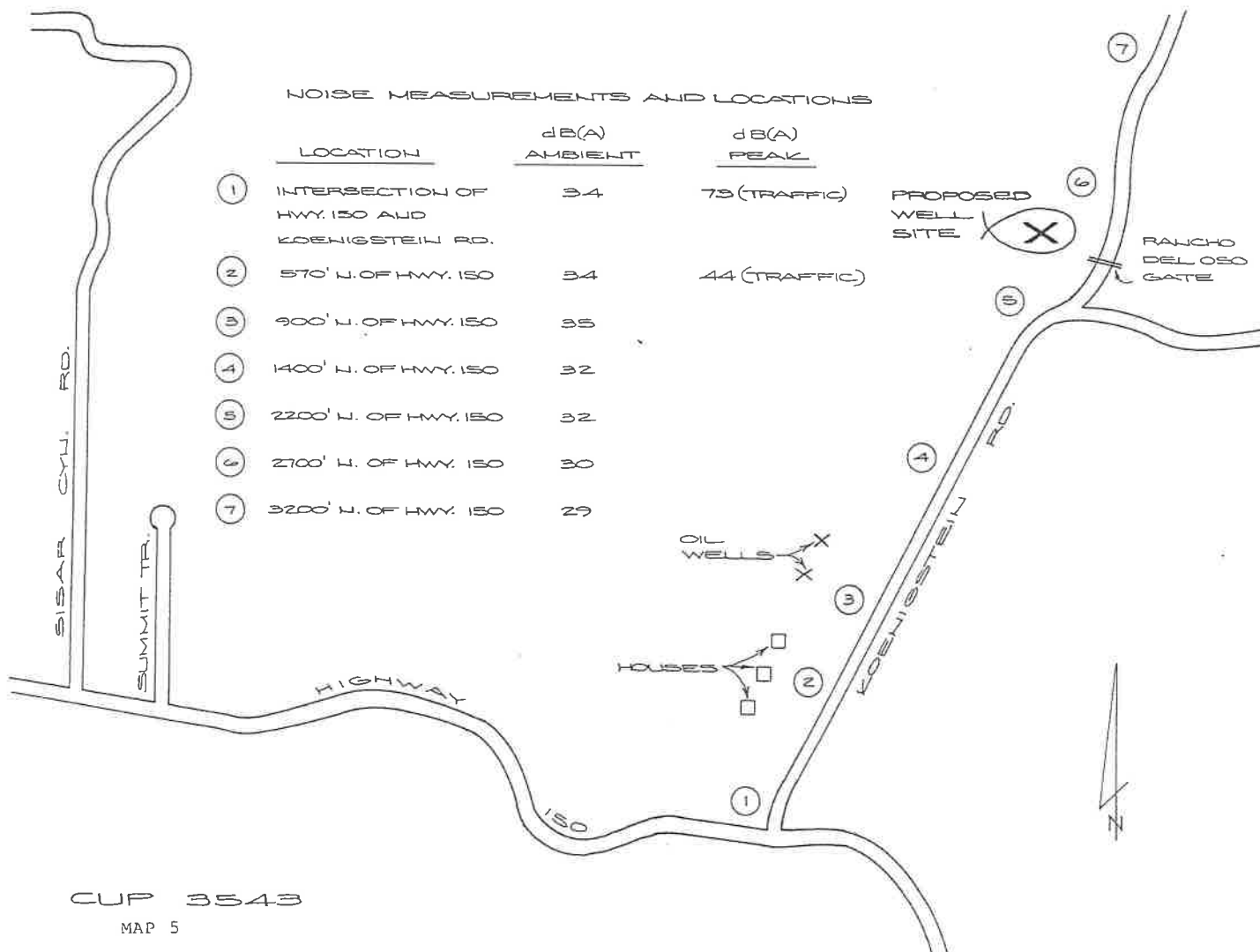


TABLE 1

Qualitative Descriptors of Urban and Suburban Detached Housing
Residential Areas and Approximate Daytime Residual Noise Level (L_{90}).
Add 5 dB to These Values to Estimate the Approximate
Value of the Median Noise Level (L_{50}).

Description	Daytime Residual Noise Level in dB(A)	
	Typical Range	Average
Quiet Suburban Residential	36 to 40 inclusive	38
Normal Suburban Residential	41 to 45 inclusive	43
Urban Residential	46 to 50 inclusive	48
Noisy Urban Residential	51 to 55 inclusive	53
Very Noisy Urban Residential	56 to 60 inclusive	58

Source: Environmental Protection Agency, 1971

Fire Protection¹²

The project site is located in an extreme fire hazard area according to the Ventura County Seismic and Safety Element. The applicant indicates that all fire department and U.S. Forest Service Uniform Fire Code requirements would be adhered to, including the presence on the site of 20,000 gallons of water for use in event of fire.

Impact: The Ventura County Fire Department indicates that adherence to these requirements would provide adequate protection for the project area.

Visual Assessment

The Koenigstein Road area is predominantly in an undisturbed natural state. Three homes are located approximately 600 feet north of the intersection of Koenigstein Road and State Route 150. Adjacent and north of these homes is the Sisar Oil Corporation operation. Three oil drilling operations southwest of the project are visible from the Road. The area between the Sisar operation and Rancho Del Oso (approximately one-half mile) and adjacent to the Road is in a natural state.

The view north of the project site area includes the foothills and bluffs of Topa Topa Mountain. The view to the south is Sulphur Mountain, to the west is the Upper Ojai Valley and to the east is towards Santa Paula Canyon.

The project site is at an elevation of approximately 1,700' above sea level, approximately 280' higher than the elevation at State Route 150 and Koenigstein Road. The project would require the removal of natural vegetation and excavation to create a 200' x 200' well site and access road. The drilling operation would include a drilling rig with a drilling mast approximately 140' above ground level. The rig would be operated 24 hours per day and lighted at night. If the well is successful, pumping equipment and oil storage tanks approximately 16' high would be located on the site.

Impact: The project would change the site from a natural, hillside to an oil activity area. The project site and related oil well equipment would be visible from the south, east and west. Travelers on State Route 150 and residents south of the site on Koenigstein Road and in the Summit area could readily view this operation, in addition to three other oil well sites southwest of the project. The oil rig would not extend above the skyline when viewed from the south, east and west nor would it be visible from the homes north of the project.

Mitigating Measures: The applicant proposes to landscape the oil well site if the well is productive or to restore the site to its original topographical condition if the well is unproductive.

Other Environmental Considerations

The applicant indicates that an oil line would be used to transport the oil from the site if the well is productive. Since the proposed location of the line is unknown at this time; impacts associated with this activity cannot be evaluated.

¹²

Telecon, Inspector Burlison, Ventura County Fire Department, to Janet Lyders, October 29, 1975.

*Pipeline Assessment

Potential Flooding: The route of the proposed pipeline will cross an area in the immediate vicinity of Sisar Creek that appears to be subject to relatively heavy flooding. Recent floods have altered portions of the existing creekbed, creating several new drainage courses.

Hazards: Several hazards inherent in the placement of the proposed pipeline have been determined. First, construction activities may intensify the risk of fire. This event could easily occur if construction equipment emits sparks in dry, vegetated areas. Second, the pipeline could conceivably break and/or shear as a result of structural or environmentally induced failure (e.g., flooding, ground shaking, etc.).

Growth Inducement: If constructed, the proposed Phoenix West pipeline would theoretically have about 5,900 barrels per day of excess capacity under maximum pumping conditions. This is far in excess of the quantity of oil that is estimated to be cumulatively produced in this area of the Upper Ojai Valley. Under the cumulative probable high find scenario, seven wells producing 1,100 barrels of oil per day are projected for the area (consisting of the probable production of Silver Exploration and Phoenix West CUP-3685, see Table 6). Production levels or well drilling above this amount is presently not foreseen.

Similarly, the ARCO pipeline is theoretically expandable to 20,000 barrels of oil per day which may accommodate all of the cumulative production identified for the Upper Ojai Valley. Whether this is possible can only be confirmed through an engineering investigation of the pipeline.

Grading: As previously indicated, the pipeline will be both above and below ground according to the type of terrain conditions encountered. As such, some trenching and grading will be required for the installation of the pipe and minor grading may be required for right-of-way clearance in some locations. Specifically on the west side of Sisar Creek, the pipeline would pass through brush and probably be situated above ground. East of Sisar Creek, approximately 1,000 feet of the pipeline would be buried, requiring the excavation of 1,500 cubic feet of soil.

Flora and Fauna: The proposed pipeline route will pass through four biotic communities including chaparral, introduced grassland, riparian woodland, and southern oak woodland, respectively (detailed floral and faunal species lists prepared for the original CUP-3543 Draft EIR in 1975 are contained in Appendix G). Within the chaparral community, the dominant shrub is chamise. California sagebrush, buck brush, black sage, and laurel sumac are also present, but are infrequent. Non-native annual grasses and herbs dominate the introduced grassland community and include brome grasses, field mustard, slender wild oats, and telegraph weed. Riparian vegetation found in Sisar Creek is dominated by sycamore. Common floral associates include mulefat, willow, and Mexican elderberry. The southern oak woodland community is characterized by the presence of coast live oaks. Large shrubs, including toyon, scrub oak, and holly-leaved cherry, occupy the openings between the larger oak trees.

Impacts: The proposed pipeline creek crossing will not alter the banks or bed of Sisar Creek, influence the direction of drainage, or the ability of the creek to handle a given flow in the event of rainfall during construction operations. At some undefined level of flooding, the segment of the pipeline proposed for burial in the existing roadbed that presently crosses Sisar Creek could be susceptible to damage and/or breakage in the event of a flood. The volume of flooding which could potentially occur as well as the extent of the flood plain has not been quantitatively determined. Given these unknown parameters, the alternative of constructing a suspension bridge which could provide support for the pipeline as it spans the streamcourse and associated vegetation would require additional engineering analyses to determine its feasibility. It is noted, however, that the existing creek crossing has withstood the recent above-average winter rainfall.

If the proposed pipeline should break or rupture on land while oil is present in the line, nearby soils and plants would be adversely impacted. This effect could potentially be more significant in the event of a major flood causing pipe

failure adjacent to or over Sisar Creek and resulting in the degradation of creek waters and associated riparian vegetation. However, according to the project applicant's representative, the pipeline would be drained after every shipment of oil so that it would be essentially empty. Additionally, no oil transfer operations would occur during periods of flooding. In the event that a flood should break the line, approximately 1 gallon of oil is anticipated to be released. Recent biological assessments conducted for similar projects in the Upper Ojai Valley (e.g., CUP-3680, 3681, 3688) have evaluated the effects of potentially damaging oil spills upon terrestrial and aquatic habitats. Essentially, impacts to these communities would be significant on a local basis only. In particular, the magnitude of both the short- and long-term impacts would be more pronounced upon the riparian habitat as a function of existing stream size, point of introduction (or spill) to the point of collection (or ultimate diminution downstream) and associated plant and wildlife populations present. However, in both cases, the effects of an oil spill would be temporary and habitat restoration/recovery could be accelerated through the efforts of man.

Erosion and siltation are probable where fine-grained sediments are exposed during requisite trenching operations. In particular, the potential erosion of temporary soil stockpiles as well as losses from spillage and wind erosion may eventually result in sedimentation and siltation problems in Sisar Creek and adjacent drainage courses. However, given the fact that only 1,500 cubic feet of soil is estimated to be moved, the problems of erosion and siltation discussed above are not expected to be significant.

Construction of the proposed pipeline would result in the removal of natural habitats and the disturbance/displacement of wildlife populations existing along the pipeline route. Vegetation removal required for the pipeline right-of-way could create potential erosion hazards. The presence of man, machinery, and noise during construction operations would cause many less-tolerant species to leave nearby habitat areas. Collectively, these impacts would be significant on a local basis in chaparral, southern riparian, and oak woodlands only. Along the pipeline route, onsite communities are currently in poor to fair condition. Therefore, given existing habitat conditions coupled with disturbances from nearby production wells and requisite support activities, the area does not appear to play an important role in a regional ecosystem, and the regional impacts are expected to be insignificant.

Mitigation Measures: The following specific guidelines have been developed to mitigate, as best as is feasible, the impacts identified above. Unless otherwise indicated, the measures are proposed by Boyle Engineering Corporation.

According to the applicant, a check valve (i.e., a flapper valve used in pipelines to limit flow to one direction only) would be installed on the west end of the pipeline crossing Sisar Creek to prevent any backflow should the line break. Upstream from the crossing, a standard (or gate) valve would be installed for use only when shipping oil. These safety features combined with a monitoring program would allow immediate pipeline shutdown in the event of structural failure or natural disaster, thereby minimizing crude oil losses. The monitoring program would normally consist of monthly field inspections and/or frequent spot checks particularly during periods of heavy rainfall/seasonal flooding.

Construction methods to minimize erosion hazards should be incorporated into the project design. Requisite trenching operations (as necessary) for the emplacement of the pipe should be phased in a manner so as to prevent the susceptibility of large areas to erosion over extended periods of time. Additionally, all construction operations should be seasonally scheduled, avoiding both periods of anticipated rainfall and fire hazard. This will minimize the probability of erosion problems created onsite as well as siltation of downstream drainages. Bare soil that is exposed at other times of the year should be revegetated immediately and maintained in that state. This includes all exposed grading and trenching. Usually, this is best accomplished by hydroseeding with fast-growing fire retardant species compatible with site-specific growing conditions (i.e., soil type, slope, climate, etc.). Regarding fire hazards, the Ventura County Fire Prevention Bureau recommends that the applicant contact the local division or battalion chief of the Ventura County Fire Department to determine if environmental conditions will permit pipeline construction activities on a given day.

Measures suggested in the preceding paragraph to control erosion should be implemented to minimize impacts to biotic resources downstream. Removal of vegetation should be limited to that amount required for the pipeline right-of-way. In addition to the use of spark arrestors, all construction machinery should be equipped with mufflers to reduce noise levels generated during pipeline emplacement operations.

The following references provide discussion regarding the cumulative effects of pipeline construction:

- See page 44, fourth and fifth paragraphs (air quality).
- See page 45, seventh paragraph (biology).
- See page 47, tenth paragraph (groundwater).
- See page 50, second paragraph (traffic).

ERRC Review

In response to ERRC committee comments of 14 May 1980, archaeological considerations and mitigations are addressed in Condition No. 32, Appendix D, requiring that a modification of the permit be filed to allow for pipeline routing and construction.

BENEFICIAL IMPACTS

1. The applicant indicates the need for the development of oil production from domestic oil reserves is critical at the present time and for the foreseeable future, and the proposed project could contribute an energy source which is urgently needed.
2. The project would contribute to the county's tax base while demanding few governmental services.

ANY ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

1. The project would result in a 0.016 percent increase in reactive hydrocarbons and a 0.1 percent increase in NO_x emission countywide during the drilling phase of the project.
2. The project site is an excellent wildlife habitat. Removal of the vegetation for the proposed drilling site would have a substantial adverse impact on wildlife. During drilling, this impact would extend beyond the actual drill site due to increased noise levels and the presence of man.
3. The project would change the site from a natural, hillside, to an oil activity area. The project site and related oil well equipment would be visible by travelers on State Route 150 and residents south of the site on Koenigstein Road and in the Summit area.

SUMMARY OF MITIGATION MEASURES PROPOSED TO MINIMIZE THE IMPACT

1. Loss of drilling or other fluids into permeable terrace deposits or other permeable earth materials could occur unless precautions are implemented during drilling operations. Degradation of local groundwater could result from such losses. This well will be drilled in accordance with requirements of the California Division of Oil and Gas which requires annular sealing and testing of sealing to the base of fresh-water reservoir which should provide adequate protection of adjacent fresh-water supplies.
2. Since drilling fluids within the proposed sump may be quite saline and the potential for downward migration to apparently fresh water bearing zones exist, ground water degradation could occur. The Public Works Agency recommends the sump be lined with impervious material to prevent ground water degradation.
3. The movement of large vehicles at the intersection of State Route 150 and Koenigstein Road could create unsafe conditions. The applicant proposes that the movements of large vehicles at the intersection of State Route 150 and Koenigstein Road be mitigated by the use of traffic control personnel furnished by the Sheriff's Department. The Public Works Agency indicates that the control of traffic is the responsibility of the applicant, not the Sheriff or California Highway Patrol, as required by a County Encroachment Permit for oversized/overweight loads. Flagmen should be required for movements of large vehicles at the intersection.
4. The Ventura County Ordinance Code requires that the sump shall be enclosed by a wire fence of a wire mesh type with a maximum of 2 inches by 4 inches opening and said fence shall be secured to steel posts not less than 5 feet in height above the ground and said posts shall have 45 degree arms attached to top of posts with 3 strands of barb wire attached thereto. This measure would prevent people as well as wildlife from entering the sump.

5. Any extensive site grading may result in deposition of loose fill which may be subject to erosion. In addition, site runoff during rainfall could result in considerable transport and deposition of soil on to Koenigstein Road. The applicant indicates that all runoff water would be confined to the drill site area or on the road through the construction of a dike and that the fill and road would be compacted. The applicant proposes to landscape the site if the well is productive. The Public Works Agency indicates that more specific information would be necessary to evaluate the effectiveness of the proposed mitigating measures. Additional erosion control measures could include landscaping and/or paving channels and/or roadways with non-erodible materials.
6. If the noise level at the unattenuated diesel is 109 dB(A), the noise level one-half mile away could be as high as 45 to 51 dB(A) and three-fourths mile away could be as high as 39 to 45 dB(A). These noise levels are typical of Urban and Normal Suburban Residential communities, respectively. Residential areas located at location 2 on Map 4 and in the Summit area west of Koenigstein Road are approximately one-half and three-fourths mile from the project site, respectively. The project could increase the ambient noise level at location 2 by as much as 11 to 17 dB(A). The applicants indicate that efforts would be undertaken to attenuate the noise if complaints are received during the drilling phase of the project.
7. Several factors indicate that the site is a highly probable location of aboriginal occupation in the past. The Archaeological Society recommends that a qualified archaeologist be engaged to make a surface determination of all the area that will be involved in the well drilling, including all excavation, access roads, pipelines, firebreaks, sump and foundations. It further recommends that during the construction, if subsurface archaeological sites are encountered, all work should stop in the immediate area and a qualified local archaeologist called in to evaluate and make recommendations.
8. The project would change the site from a natural, hillside to an oil activity area. Travelers on State Route 150 and residents south of the site on Koenigstein Road and in the Summit area could readily view this operation, in addition to three other oil well sites southwest of the project. The applicant proposed to landscape the oil well site if the well is productive or to restore the site to its original topographical condition if the well is unproductive.
9. The following energy conservation measures are recommended by the Public Works Agency:
 - a. Reclamation of waste heat from engines to use where process heat is required.
 - b. Utilization of the most efficient methods of transportation, i.e., timing of trips to prevent duplication.
 - c. Adjustment of engines and selection of lubricants and fuel for highest efficiency.

ALTERNATIVES TO THE PROPOSED PROJECT

No Project

A "no project" alternative would maintain the existing environment including existing oil drilling activity, aesthetics and natural characteristics. Temporary traffic, air pollution, and noise associated with the project would not occur and the wildlife habitat would remain intact. The visual impact associated with the excavation of the site and placement of oil-related facilities would not occur.

Alternative Locations

Alternative locations for the project would be equivalent to a "no project" alternative which would maintain the existing environment and preclude the exploration of oil at the proposed location.

THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The long-term effects of the proposed project would occur only if the well is productive. These effects relate to the visual and aesthetic changes resulting from the excavation of the site and the location of oil-related facilities on the site and the removal of a wildlife habitat.

According to the applicant, the reason the proposed project is justified now rather than reserving an option for future alternatives is the urgent need for domestic oil development.

ANY IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

The irreversible environmental changes associated with a productive oil well relate to the visual and aesthetic changes to the project site and surrounding area, the removal of a wildlife habitat, and the extraction of oil, a nonrenewable resource.

GROWTH-INDUCING IMPACT OF THE PROPOSED PROJECT

If the proposed project is successful, expanded oil exploration on the project site could be expected. The applicant indicates that the subject parcel could accommodate one additional drill site. Expansion of oil activity on the site would require a modification to Conditional Use Permit No. CUP-3543. Expansion of oil activity beyond the site would require a new Conditional Use Permit.

*CUMULATIVE ANALYSIS

State law requires that the cumulative impact of the proposed project in conjunction with all other proposed and probable future oil drilling/production activities in the study area be analyzed. To accomplish this, approved project case files were examined for information on existing operations. A questionnaire was mailed to oil development operators in the Upper Ojai; the purpose of which was to determine the extent of future probable oil development activity. The questionnaire was followed by a telephone call discussion and, in some cases, an interview and a brief history of oil development in the Upper Ojai Valley was prepared. The cumulative parameters are described in detail in the subsections which follow.

Cumulative Setting

The Upper Ojai has been the scene of oil drilling and production activity on a continuous basis since well before the year 1900. Initial exploration and production occurred in the Silverthread and Lion Mountain producing zones of the Ojai Oil Field. Development of the three other producing areas, Sulphur Mountain, North Sulphur Mountain, and Sisar Creek, began after the turn of the century.

The first oil well was drilled in 1866 in the Silverthread area, the easternmost producing area of the Upper Ojai, and it produced up to 30 barrels of oil per day. In 1893, the first well in the Lion Mountain area was drilled and produced 15 barrels per day. The drilling of exploratory wells continued and increased somewhat after the turn of the century. Drilling began in the Sisar Creek area and the North Sulphur Mountain area in about 1907 and 1911, respectively. In 1917, much of the land in the oil producing areas of the Upper Ojai was acquired by the Pan American Petroleum Company; during the following 20 years, exploration and production of oil in the area declined with only scattered wells drilled. In 1937, the Richfield Oil Company (now ARCO), acquired much of the land area from Pan American. Drilling activity was increased by ARCO and by about 1950 each area had been extensively explored. (California DOG, Summary of Operations California Oil Fields, 1963, 1966, 1967, 1968.)

The major oil-producing strata of the Ojai field have historically been the Monterey Formation (Miocene Age). Strata are found at various depths in the area due to the high seismic and tectonic activity of the area resulting in the area's scattered fault zones and associated pay zones. Early wells that were drilled in the Ojai field area ranged from a few hundred feet to about 4,000 feet, using either cable tools or rotary equipment. In 1951, when oil production in the area was high, ARCO drilled the deepest well (of that time) in the Silverthread area, a total of 9,955 feet. A commercial quantity for production was not found. (California DOG, 1968.)

Oil drilling activity in the Ojai field remains high today. More new wells were drilled in the Ojai field in 1976 and 1977 than in any other field in Oil and Gas District 2 (which covers all of Ventura County and some of Santa Barbara and Los Angeles County). (California DOG 1976, 1977 Annual Report.)

Significant new finds have occurred as a result of the drilling activity. In 1976, Phoenix West Oil and Gas Corporation discovered a new Miocene pool in the Sisar Creek area with the completion of a well located about 1 mile northwest of the former productive limits of the field. Gulf Oil Corporation completed a new discovery well on Forest Service land about 2,000 feet northwest from the nearest producing well. This well is producing oil from fractured Miocene shale. In 1977, the productive limits of the North Sulphur Mountain area of the Ojai field were extended more than 1/2 mile to the northwest with the completion of an ARCO well. Two additional wells completed by ARCO in 1977 expanded the Sisar Creek area by about 1,000 feet to the southwest and the North Sulphur Mountain area by about 750 feet to the north. Total oil production for the Ojai Oil Field in 1977, according to California DOG statistics, was 1,115,237 barrels as shown in Table 2.

California DOG has also estimated known reserves in the Ojai field to be about 8,300,000 barrels. At the current rate of production, it is possible that known reserves will be extracted within the next ten years.

Prior to 1947, there was no attempt by the county of Ventura to regulate oil drilling and production activity in the Upper Ojai Valley.

TABLE 2
EXISTING OIL PRODUCTION CHARACTERISTICS FOR
OJAI OIL FIELD VENTURA COUNTY
(DOG 1977 ANNUAL REPORT)

<u>Area</u>	<u>Producing³ Wells</u>	<u>1977 Production (barrels)</u>	<u>Cumulative² Production (barrels)</u>	<u>Daily Production (barrels)</u>	<u>Estimated Reserves (barrels)</u>
Lion	8	7,513	447,000	3	---
North Sulphur	30	303,117	3,523,000	28	---
Silverthread ¹	69	746,586	6,966,000	38.6	---
Siser ¹	28	23,885	2,134,000	2.6	---
Sulphur	8	6,076	301,000	2	---
Weldon ⁴	3	26,060	747,000	26	---
Ojai Field Total ⁵	145	1,115,237	14,370,000	21	8,300,000

¹Figures estimated from 1976 annual report data.

²Includes 232,000 barrels from The Tip Top (area which is now essentially abandoned).

³Actual and potential wells is 190.

⁴Not in Upper Ojai planning area.

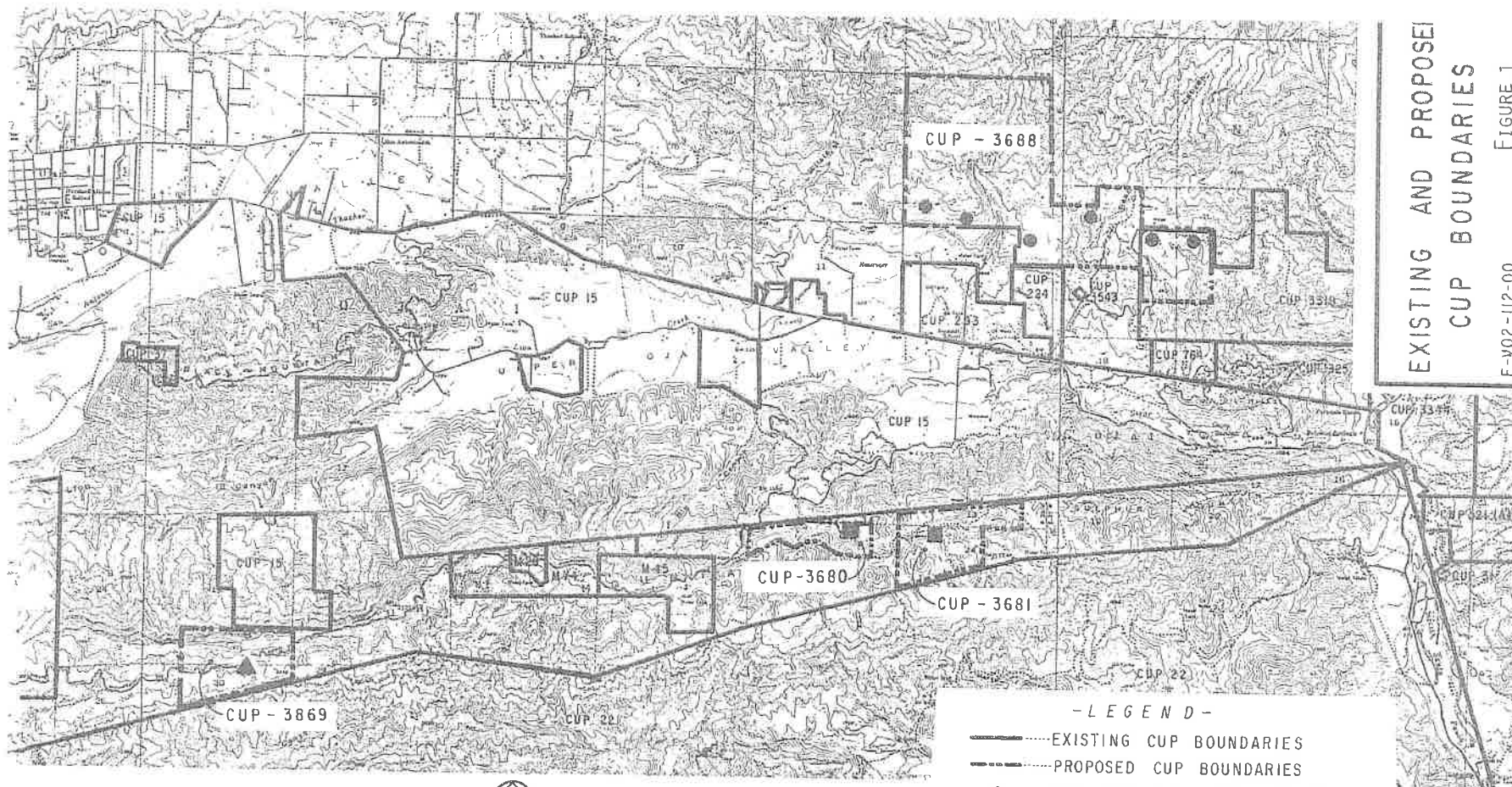
⁵Figures are taken from the DOG 1976 and 1977 Annual Reports and do not reflect an accurate total from all the figures shown here.

On March 25, 1947, the first County Land Use Ordinance (No. 412) was adopted requiring a special use permit in all zones for the "development of natural resources, together with necessary buildings, apparatus, or appurtenances incident thereto."

Following the establishment of County Land Use Ordinance No. 412 in 1947, several permits were granted to oil companies for drilling and extraction of oil and natural gas in the Upper Ojai Valley. A significant aspect of these first permits was that no conditions of operation were attached to them as was the case for all permits granted prior to 1961. On November 30, 1961, the Ventura County Board of Supervisors adopted Section 8163-14 of the Ventura County Ordinance Code which imposes 11 primary conditions on all existing and future oil and gas drilling and extraction permits. Commencing in 1970, the Ventura County Planning Commission began to impose additional conditions, specific to the permit being requested, in order to mitigate potential impacts.

Table 3 lists all existing oil permits and production operations in the Upper Ojai Valley portions of the Ojai Oil Field. The permittees which are indicated in the table are the major operators; however, they may not be the only oil operators working a permit area. Figure 1 illustrates the area covered by existing oil permits in the Upper Ojai Valley.

The oil-production operations in the Upper Ojai area consist of not only production oil wells, but many other major facilities, such as oil and gas pipeline, storage tanks, truck transfer facilities, oil and gas processing facilities, and numerous oil and gas flow lines. The location of all producing wells (as well as dry holes) are shown in Figures 2 and 3. These figures are reduced copies of the California DOG well status maps and are current up to March, 1979. A planning area boundary has been placed on these figures to show which facilities are considered as being within the Upper Ojai area. It is noted that the Ojai Oil Field extends much further to the west, but generally this is a wildcat area with no production; and the Weldon Canyon area of the Ojai field, which is a producing zone, is too far removed geographically from the Upper Ojai to have a significant effect on the area.

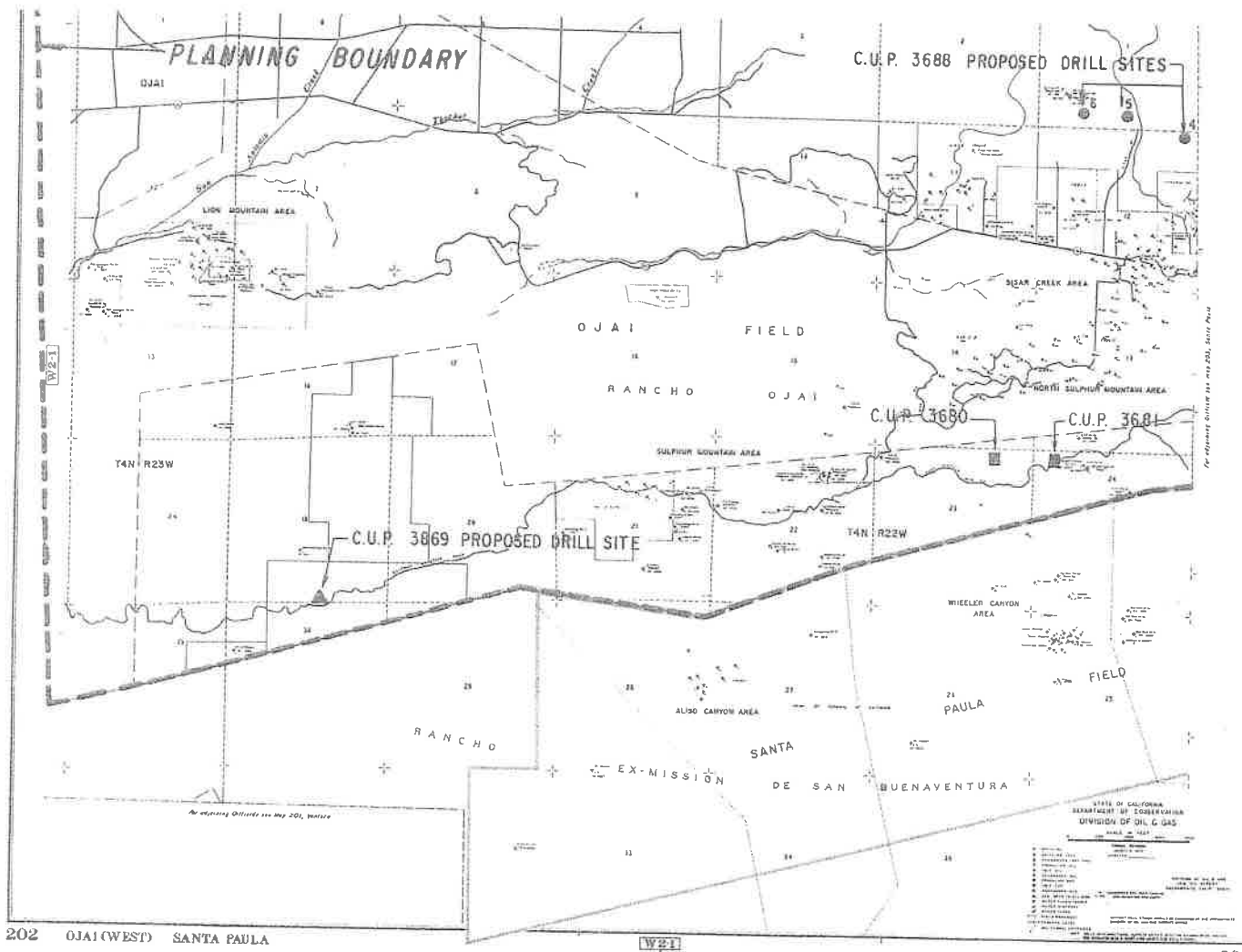


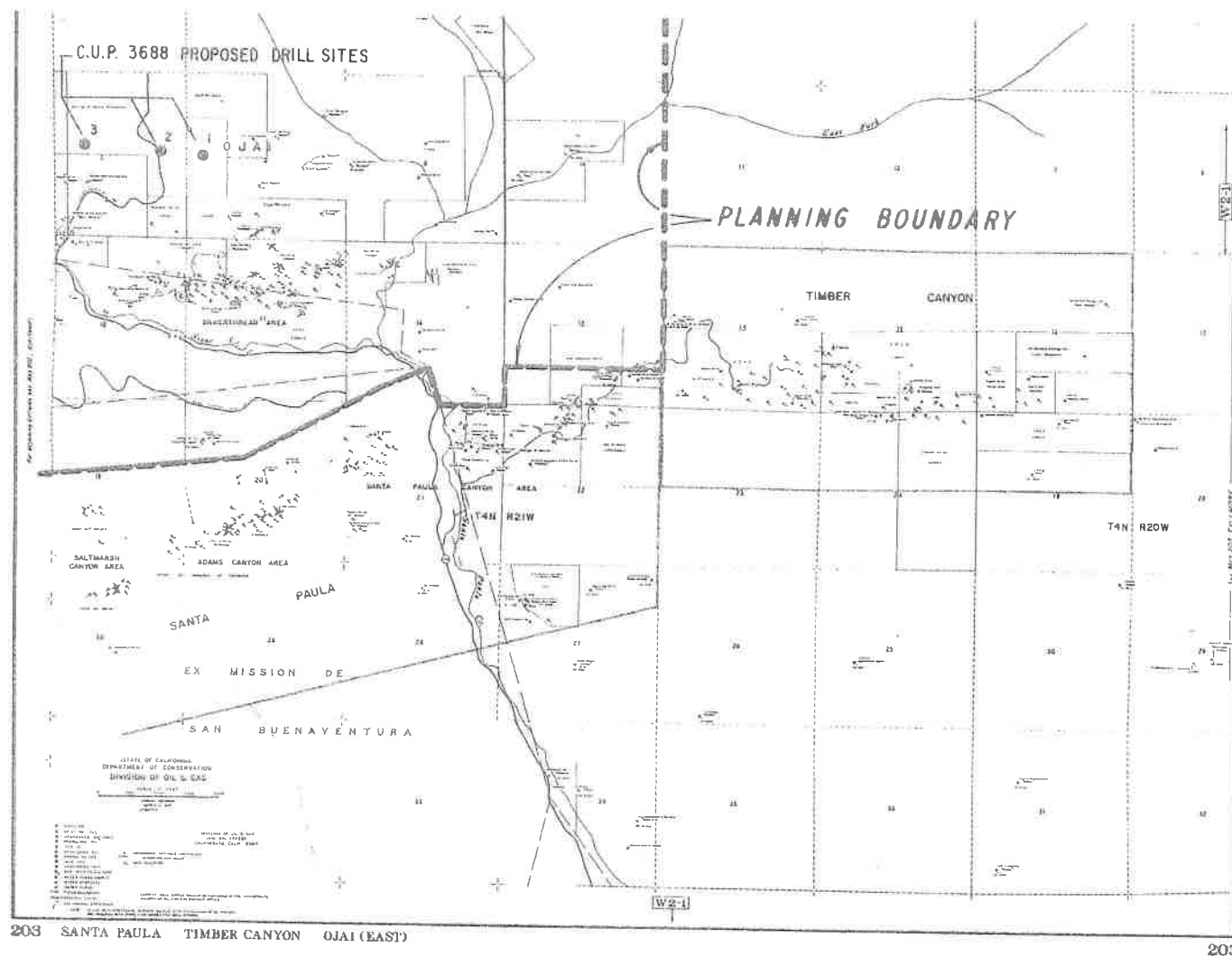
EXISTING AND PROPOSED
CUP BOUNDARIES

FIGURE 1
E-V02-112-00

MAP SCALE: 1" = 4000' (REDUCED COPY OF USGS QUAD SHEET)

- LEGEND -
- EXISTING CUP BOUNDARIES
 - - - PROPOSED CUP BOUNDARIES
 - ▲ PROPOSED DRILL SITE - CUP 3869
 - PROPOSED DRILL SITE - CUP 3680, 3681
 - PROPOSED DRILL SITE - CUP 3688





OJAI VALLEY AREA
D.O.G. WELL STATUS MAP

E-V02-112-00 Figure 3



SCALE: 1" = 4000'
(REDUCED COPY OF D.O.G. MAP)

TABLE 3
EXISTING OIL PERMITS AND PRODUCTION FACILITIES
UPPER OJAI VALLEY (AS OF MARCH, 1979)

<u>Permit No.</u>	<u>Permittee</u>	<u>Location</u>	<u>Actual Production Wells</u>
CUP-15 ¹	ARCO and Chanslor-Western	7680 Acres on Southern Half of Upper Ojai	89
CUP-325 ²	Sun Oil	Silverthread Field	48
CUP-764 ²	Dr. Harold Alexander	Silverthread Field	9
CUP-224 ²	Silver Exploration Co.	Sisar Creek	10
CUP-293 ²	Ojai Oil Co.	Sisar Creek	10
CUP-3319	ARGO Petroleum	North of Silverthread Field	5
CUP-3344	ARGO Petroleum	Ferndale Ranch	5
CUP-3543	Phoenix West	Sisar Creek	2
3	Gulf Oil	In U.S. Forest, North of Silverthread Field	1 (MP Lane Federal)
M-45 ²	Exeter Oil Co.	Sulphur Mountain	1
M-26 ²	Phoenix West	Sulphur Mountain	6
M-74 ²	Phoenix West	Sulphur Mountain	1
CUP-37 ²	W. Perry Barker	Lion Mountain	2
4	Anderson	Lion Mountain	<u>6</u>
		Total	195

¹Five more wells are planned under existing permit; included in probable projects.

²No conditions on permit except the 11 primary conditions imposed by Ventura County Ordinance Code Section 8163-14.

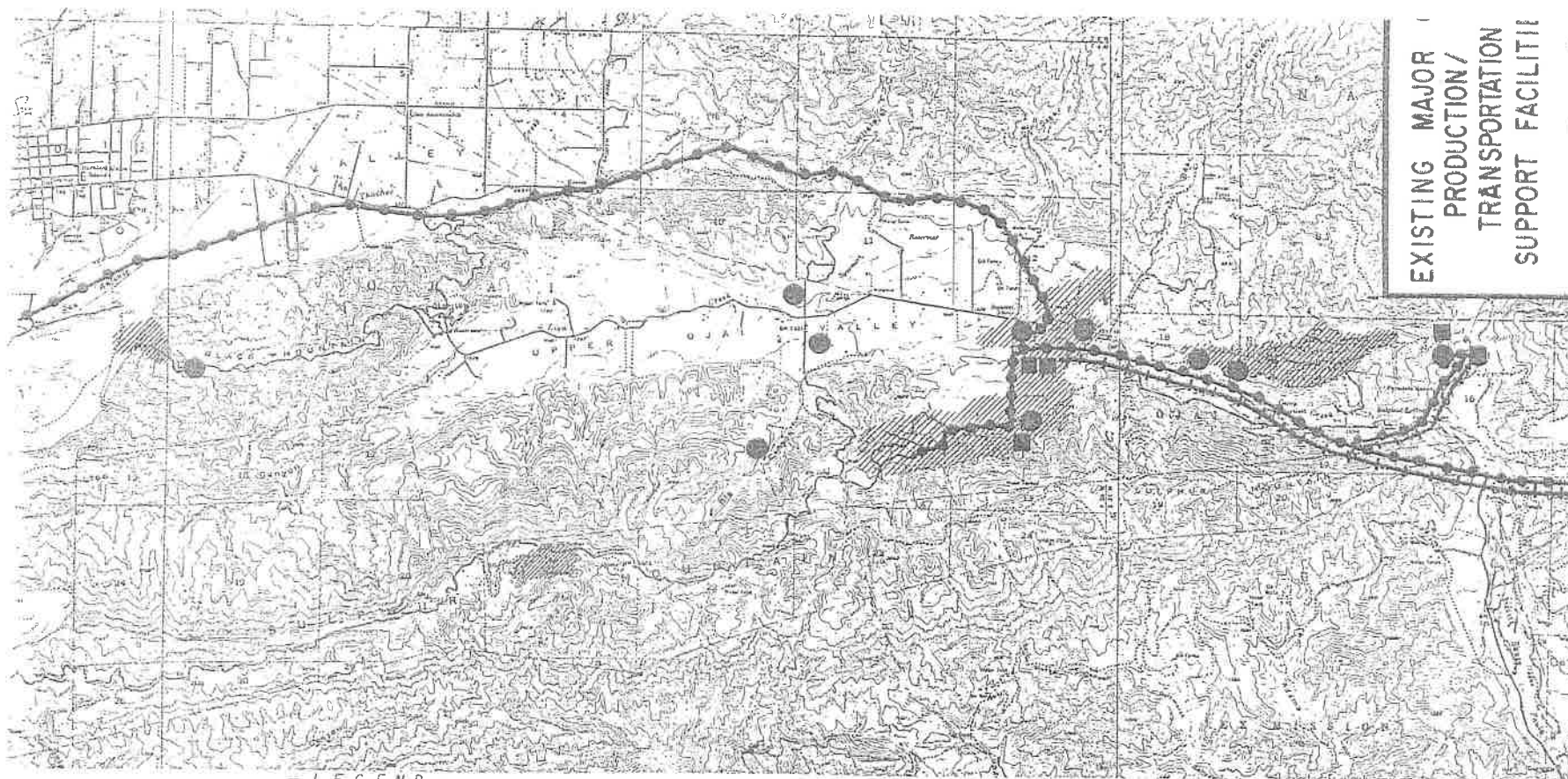
³No permit request filed by Gulf because site was located on Forest Service lands. This well is presently "shut-in."

⁴Permit number unknown.

⁵Source of information is county of Ventura permit files and California DOG Well Status Maps, March, 1979.

Existing major oil support facilities in the Upper Ojai are illustrated in Figure 4. Also indicated in this figure are the major oil-producing zones in terms of surface area. In addition to the facilities shown in Figure 4, there are many small storage tanks on individual production sites and there are many oil and gas flow lines lying on the ground surface, the location and existence of which has never been recorded.

As shown in Figure 4, only one major oil pipeline exists which exports oil from the Upper Ojai. This pipeline is a 6-inch-diameter line owned by ARCO. It originates at the ARCO oil-processing facility to the south of the



- LEGEND -
- EXISTING MAJOR OIL PIPELINE.....
 - EXISTING MAJOR GAS PIPELINE.....
 - EXISTING MAJOR TANK FARM.....
 - EXISTING MAJOR PROCESSING FACILITY.....
 - PRINCIPAL OIL PRODUCING AREAS.....



SCALE: 1" = 2000'

Highway 150/Sisar Road intersection, and proceeds easterly to Fillmore. The total length of the pipeline is 15.4 miles and it is approximately 94 percent buried and 6 percent above ground. The pipeline is classified as a common carrier line, which means that its operation is regulated by the Public Utilities Commission. The pipeline operator, Four Corners Pipe Line Company, reports that the average daily pumping capacity is presently about 7,600 barrels of oil per day. Peak operating capacity is estimated at 11,200 barrels per day. Pipeline capacity at any particular time is a function of pumping capacity, storage capacity, and the viscosity of crude oil flowing through the line.

Four Corners Pipe Line Company stresses that a definitive determination as to the feasibility of expanding the capacity of the pipeline would require a detailed engineering evaluation. However, it was estimated that with additional pumping capacity and considering the type of terrain that the pipeline goes through and assuming that the quality of new crude oil contributed to the line would be similar in consistency to that which is going through the line now, the pipeline may be able to convey up to 20,000 barrels of oil per day. It was pointed out that historically the pipeline has had a greater pumping capacity than it presently has and that more crude oil has flowed through than presently does. It is believed that pumping capacity could be added to the pipeline at points of connection with contributing pipelines.

The oil pipeline is paralleled by a 5-inch-diameter compressed gas pipeline. Flow in the gas pipeline is from east to west, and the gas pipeline continues on westerly as shown in Figure 4. The gas pipeline presently transports about 171,590,000 cubic feet of natural gas per month. ARCO, which operates this pipeline, reports that the maximum capacity is more than double the present level of usage.

The ARCO oil pipeline is used by other operators on a contract and case-by-case basis. If there is not a formal contract for utilizing the pipeline, ARCO will allow some operators to use their facilities on a capacity available basis. There have been occasions where operators have been denied access to the line through ARCO facilities because ARCO was utilizing its full capacity.

According to the 1977 DOG Annual Report, approximately 1,100,000 barrels of oil were produced in the Upper Ojai area of the Ojai Oil Field from 145 producing wells, the average per well being about 21 barrels per day. However, it was found that as of March of 1979, there were about 195 producing wells. At approximately 21 barrels per day, it is estimated that the total daily production from the project area from existing wells is about 4,095 barrels per day. Of this amount, it is estimated that about 430 barrels per day are removed from the Upper Ojai via tank truck; and the remainder of the oil produced in the project study area, about 3,665 barrels per day, is exported via the ARCO pipeline (estimates of tank truck activity were made based on contacts with the various oil operators). An apparent discrepancy exists between the average daily capacity of the ARCO line, 7,600 barrels per day, and the estimated project area generated oil shipped through the pipeline, 3,665 barrels per day. A plausible explanation is that some oil is added to the pipeline outside of the project study area, from the Santa Paula and Timber Canyon fields. This was confirmed by Four Corners Pipe Line Company. Also, production may have increased in the study area this past year, for which there is no data available.

The existing land-use development pattern in the Upper Ojai can be characterized as rural. Population has always been sparse and agriculture has been the predominant land-use activity for many years. Recent development activity, however, has been comprised mainly of residential units. Residential land use and growth has centered in areas along Sisar Road and Koenigstein Road near Highway 150 and along Sulphur Mountain Road.

An Ojai Valley Area Plan has been adopted by the Ventura County Resource Management Agency which proposes land uses for the Ojai Valley, including the Upper Ojai, which would allow low density (one dwelling unit per .5 to 5 acres) and very low density (one dwelling unit per 5 to 40 acres) residential development in the project area. A growth rate of about 0.4 percent per year is envisioned in the plan.

Future Oil Development Policies - The plan also contains goals and policies with respect to future oil development which are worthy of consideration here. The policy statements listed below have been adopted by the Ventura County Board of Supervisors.

ISSUE 1 What should be the character of present and future oil and gas development in the valley?

Goal 1 The oil and gas industry should utilize "Best Available Control Technology" (BACT) as outlined by APCD Rules and Regulations. Conditions applied to the CUP's for oil development should be enforced to protect the health and welfare of the citizens and the character of the Ojai Valley.

- Policy 1 All existing regulations shall apply and be enforced.
- Policy 2 All gases emitted from all wells should be collected and used or removed for sale or proper disposal, if feasible. Flaring or venting would be in case of emergency or testing only.
- Policy 3 Electric production equipment shall be used where practical to alleviate pollution from internal combustion engines.
- Policy 4 All oil and gas production sites or development shall be landscaped in accordance with an approved plan.
- Policy 5 All production sites shall be screened from any public road or residence located within 500 yards by natural terrain or flora which will reach the height of production equipment within five years.
- Policy 6 Drill sites that would be silhouetted on a ridge or prominent knoll shall not be permitted.
- Policy 7 Drill sites necessitating an inordinate amount of cut and fill shall not be permitted.
- Policy 8 New oil activity of any kind should not affect the quality or quantity of the present water supply so as to pollute or to prevent the domestic or agricultural use of the water supply.
- Policy 9 All well sites that have been abandoned or are no longer producing shall be restored to their original condition as nearly as practicable.
- Policy 10 There should be no refining in the Ojai Valley area.
- Policy 11 All oilfield facilities shall be kept to a minimum size.

Goal 2 All existing oilfields shall be upgraded aesthetically to meet reasonable standards.

Goal 3 All existing permits should be conditioned so as to reflect and support Goals 1 and 2.

Source: Ojai Valley Area Plan Draft EIR, Ventura County Environmental Resources Agency Planning Division, April, 1979.

Approved Projects

Table 4 contains all recently approved permits which have not yet been developed. Up to 31 wells on six sites could be developed; however, ARCO Petroleum currently plans to drill between one and nine wells on up to three sites. Drilling could take place on these sites within the next one to four years. Under a medium find scenario, roughly 126 barrels of oil per day would be produced from approved permit operations. A high find would result in up to 1,750 barrels per day initially, decreasing annually thereafter by about 20 percent.

Proposed Projects

Table 5 includes all permit applications currently under consideration by the county of Ventura. If all permits are granted, development of these sites would take place over the next five years. A medium find would result in the development of 15 wells on seven different sites and would result in the production of about 1,184 barrels of oil per day initially. A high find scenario would result in the development of 27 wells on nine different sites. Production would be 6,200 barrels per day initially, decreasing to about 2,000 barrels per day several years after initial production. Detailed information on the proposed developments is contained in the specific EIR on each permit.

Probable Projects

Table 6 contains a listing of all probable future oil operations in the Upper Ojai Valley. Not all operators contacted had plans to develop additional wells.

It is interesting that the time frame for development of "probable" activity ranges from one to five years from present. Most operators had definite plans to drill the number of wells indicated in the table. However, the quantities of oil expected to be discovered was thought by the operators to be highly speculative. Oil operators were quick to point out that the information in Table 6 should not be construed in such a way as to place limits on existing or future permits.

The medium find scenario for the probable future operations would result in the development of 28 additional wells on 22 sites and the production of about 1,876 barrels of oil per day.

A high find scenario would result in the development of 46 wells on 29 sites and produce about 6,590 barrels of oil per day.

Considering all approved, proposed, and probable oil developments, a high find would result in the development of 83 wells on 42 sites. Production levels under a high find initially could be more than three times the existing production rate. However, initial production levels would decline after a few years, leveling off at around 5,500 barrels per day.

Approved, proposed, and probable drilling and production activities, including access roads, flow lines, pipelines, and major storage facilities, are illustrated in Figure 5. This figure includes drilling site locations as well. Each drilling site will additionally have a small oil storage tank. High oblique aerial panoramic photographs are included as Figures 6 and 7 and show the general area of major oil facilities and activities.

Proposed and probable future oil drilling/production operations are influenced by environmental factors, both directly and indirectly related to oil facilities. Probably the most important factor affecting probable future oil operations is the availability of exportation facilities to transport the oil produced out of the Upper Ojai. Other factors of importance affecting probable future operations include the availability of drilling rigs, known versus unknown reserves, and the negative public attitude towards existing and future oil operations.

In the Cumulative Setting, it is indicated that the existing ARCO pipeline, the only oil pipeline out of the Upper Ojai Valley, may be running near its presently available pumping capacity. However, with additional pumping

TABLE 4
APPROVED OIL PERMITS
UPPER OJAI VALLEY

Permit No.	Permittee	Location	DRILLING			POTENTIAL PRODUCTION							
			Approved Sites	Approved Wells	Time Frame (Yr)	MEDIUM FIND				HIGH FIND			
						Sites	Wells	Quantity BBLs/Day/Well	Total BBLs/Day	Sites	Wells	Quantity BBLs/Day/Well	Total BBLs/Day
CUP-3344 MOD.	Argo Petroleum	Ferndale Ranch	5	30 ⁽¹⁾	1-4	2	5	21	105	3	9	150 ⁽²⁾	1,350
CUP-3653	Phoenix West	Sulphur Mountain	1	1	1	1	1	21	21	1	1	40	40
			6	31	1-4	3	6		126	4	10		1,750

(1) Though 30 wells have been approved, the permittee states that between 1 and 9 wells on three sites will actually be drilled.

(2) 150 barrels/day/well is initial production, which is expected to decline by approximately 20% per year.

Table 5
PROPOSED OIL PERMITS
IN THE UPPER OJAI VALLEY

Permit No.	Applicant	Location	DRILLING			POTENTIAL PRODUCTION							
			New Sites	Proposed Wells	Time Frame (Yr)	MEDIUM FIND				HIGH FIND			
						Sites	Wells	Quantity BBL/Day/Well	Total BBLs/Day	Sites	Wells	Quantity BBL/Day/Well	Total BBLs/Day
CUP-3869	Phoenix West	South side of Sulphur Mtn.	1	1	1	1	1	100 ⁽²⁾	100	1	1	300 ⁽²⁾	300
CUP-3680	Union Oil	Sulphur Mtn.	1	10	2-5	1	5	100	500	1	10	250	2,500
CUP-3681	Union Oil	Sulphur Mtn.	1	10	2-5	1	5	100	500	1	10	250	2,500
CUP-3688	ARGO Petroleum	No. of Hwy. 50	6	6	2-5	4	4	21	84	6	6	150 ⁽¹⁾	900
			9	27	1-5	7	15		1,184	9	27		6,200

(1) 150 BBLs/Day/Well is initial production, which is expected to decline by approximately 20% per year for several years.

(2) Indicates initial production which will decline by about 50% the first year.

* Designates drilling from an existing site.

Table 6

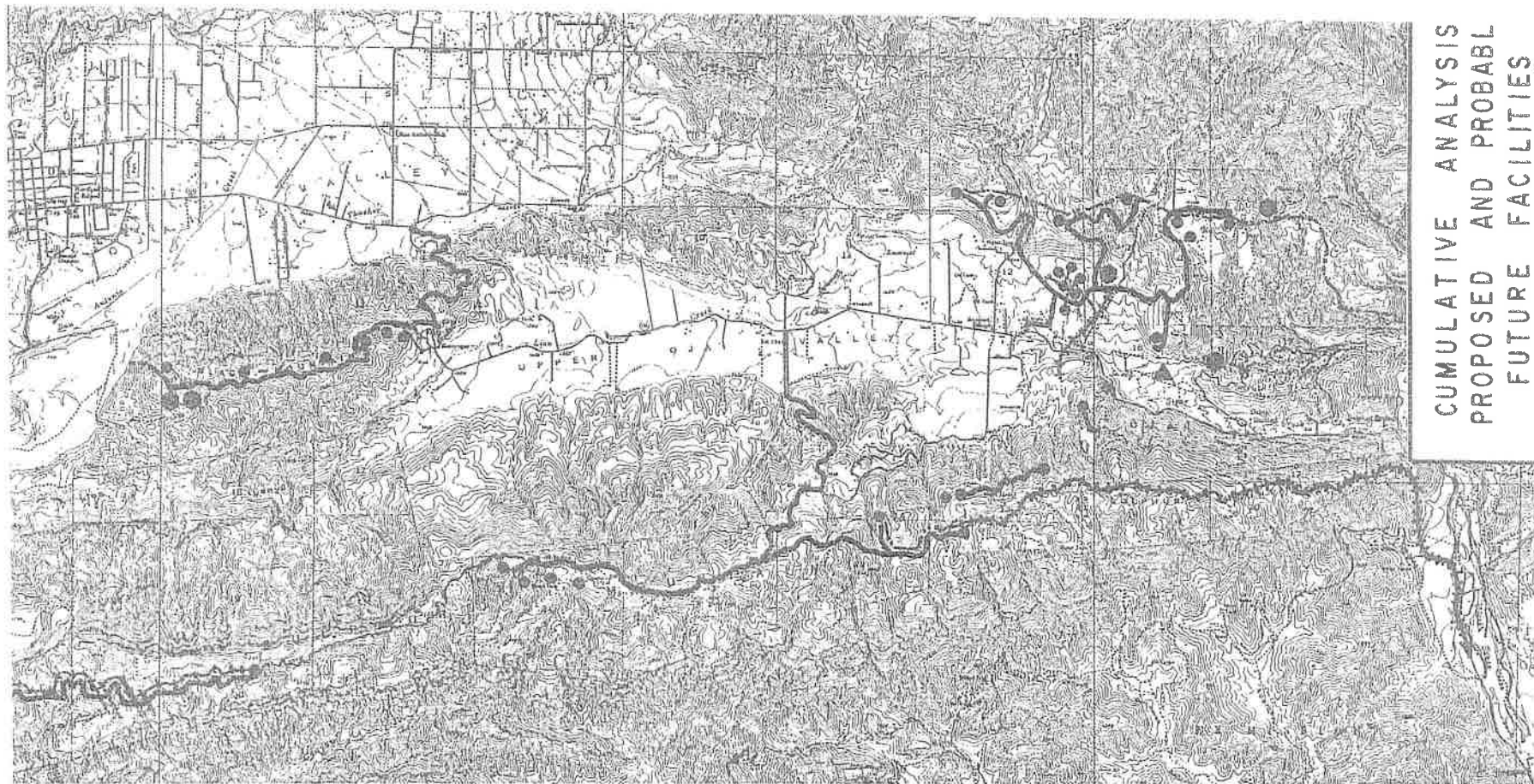
PROBABLE OIL OPERATIONS
IN THE UPPER OJAI VALLEY (3)

Operator	Location	PROBABLE DRILLING			PROBABLE PRODUCTION							
		Sites	Wells	Time Frame (yr)	MEDIUM FIND				HIGH FIND			
					Sites	Wells	Quantity BBL/Day/Well	Total BBLs/Day	Sites	Wells	Quantity BBL/Day/Well	Total BBLs/Day
Cabeen Exp.	Sisar Creek (3543)	1	2	5	1	1	60	60	1	2	100	200
Cabeen Exp.	Silverthread (764)	*(1)	1	5	*(1)	1	60	60	*(1)	1	100	100
Cabeen Exp.	Silverthread (New)	1	6	5	1	3	60	180	1	6	100	600
Barker, W. Perry	Lion Mountain	*(2)	3	un.	*(2)	3	50	150	*(2)	3	100	300
ARCO Sup 15, 16 and 31	Sisar/North Sulphur	5	5	1	5	5	80	400	5	5	100	500
Silver Exp.	Sisar Creek	6 ⁽¹⁾	6	2	4	4	100	400	6	6	150	900
Phoenix West CUP-3685	Sisar Creek	1	1	1	1	1	50	50	1	1	200	200
Phoenix West CUP-3746	Black Mtn.	5	5	2 ⁽²⁾	3	3	35	105	5	5	100	500
Phoenix West M-74	Sulphur Mtn.	4	4	2 ⁽²⁾	1	1	15	15	4	4	35	140
Phoenix West CUP-3747	Black Mtn.	1	3	2 ⁽²⁾	1	1	35	35	1	3	100	300
Phoenix West CUP-3869	South Side of Sulphur Mtn.	*(1)	9	1-4	*(1)	4	100	400	*(1)	9	300	2,700
ARGO Petroleum	U.S. Forest North of Silverthread	*(1)	1	2-5 1-5	*(1)	1	21	21	*(1)	1	150	150
					22	28		1,876	29	46		6,590

(1) Four sites are envisioned; however, if high find is encountered, two more wells may be developed.




(2) Lawsuits may affect timing.




(3) The information in this table is speculative and subject to change upon application by the operators to the County for permits to develop these probable oil operations.



CUMULATIVE ANALYSIS
PROPOSED AND PROBABL
FUTURE FACILITIES

- L E G E N D -

PROBABLE OIL PIPELINES 
 PROBABLE ACCESS ROADS 
 PROBABLE FLOWLINES 

PROBABLE STORAGE FACILITY 
 PROBABLE (NEW) DRILL SITE LOCATIONS 
 PROBABLE NEW DRILLING FROM EXISTING SITES 



MAP SCALE: 1" = 4000'
 MAP SOURCE: USGS QUAD SHEET



HIGH OBLIQUE AERIAL PANORAMIC PHOTO
UPPER OJAI VALLEY LOOKING EASTERLY

E-V02-112-00

Figure 6



HIGH OBLIQUE AERIAL PANORAMIC PHOTO
UPPER OJAI VALLEY LOOKING EASTERLY
(PHOTO SHOT FROM PT. EAST OF FIG. 6)

E-V02-112-00

Figure 7

capacity added, it may be possible to ship up to 20,000 barrels per day through the line. It appears that sufficient capacity could be added to handle the high find cumulative scenario as discussed in this report. Individual oil operators or groups of operators would be required to finance any pumping capacity added to the pipeline.

Concerning drilling rigs, there is presently a shortage of drilling rigs in Southern California. The availability of drilling rigs affects the number of drilled operations that could occur at any one time. For purposes of estimates contained in this cumulative analysis, it is assumed that no more than three drilling rigs could operate in the Upper Ojai at one time.

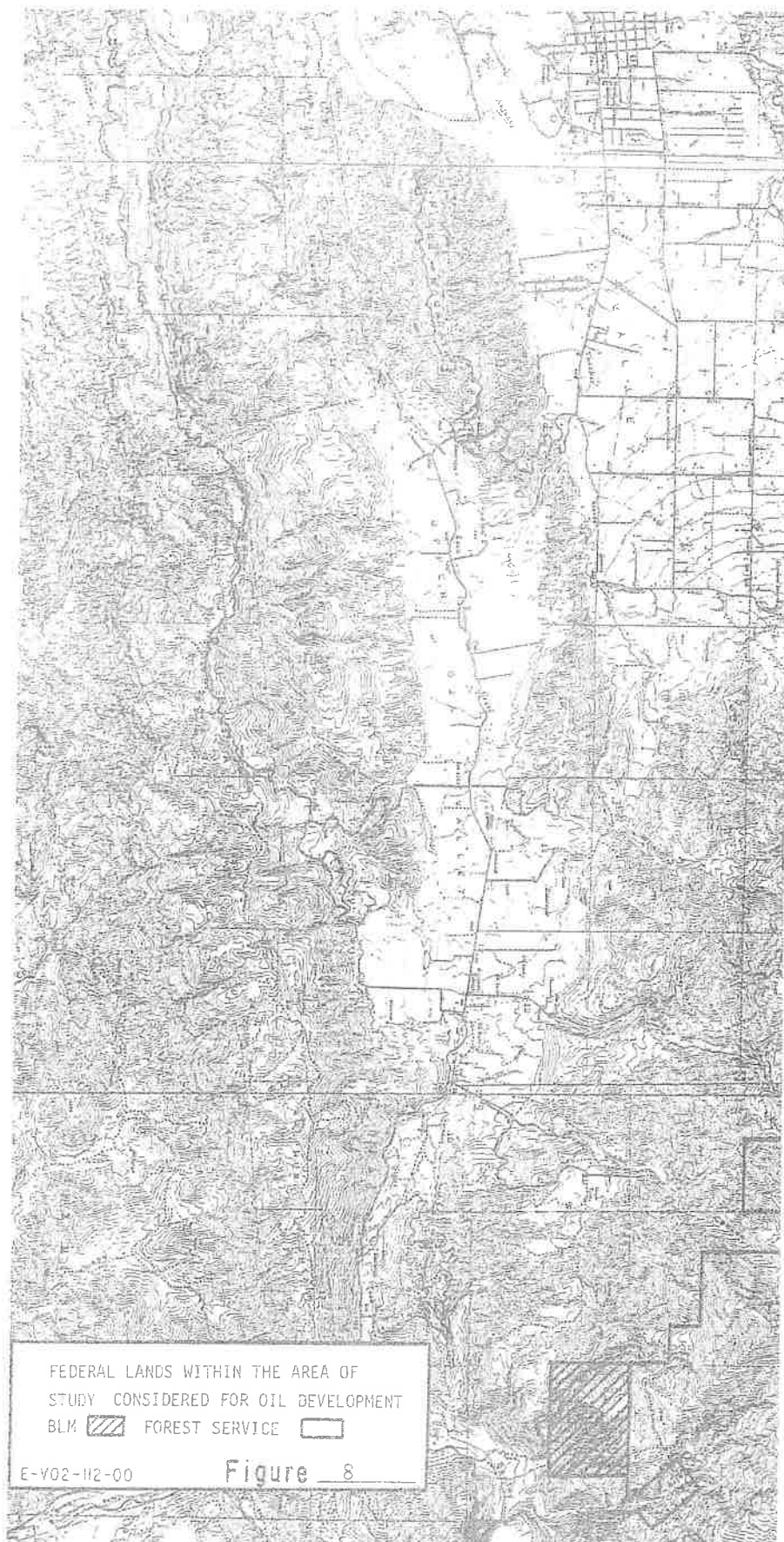
According to the California DOG data, known reserves in the Ojai Oil Field could be depleted within 10 years at the current rate of extraction. The big hope for the Upper Ojai is that the Sespe and Vaqueros formations, which have barely been explored, will prove productive. These formations may or may not contain a significant quantity of oil. In spite of projections of known reserves; therefore, it appears that oil activity will continue in the valley, given reasonable success of probable operations, through the year 2000.

Another factor that may affect oil production activity in the Upper Ojai Valley is the deregulation of the price of a barrel of domestic crude oil. While information is sketchy in this area, it is thought that deregulation of oil prices will make marginal operations more economically viable and, in fact, may spurn a certain amount of reworking of existing wells.

Public attitude is another factor which may affect future oil operations. The desire by more operators to use pipelines to ship crude oil out of the valley stems partly from local public criticism of oil-related truck traffic. The proximity of residential development to drilling and production activities has resulted in numerous complaints from valley residents. By expanding the oil drilling/production activities, in general, in the Upper Ojai, probable future projects are likely to increase the interface between valley residents and oil activities, and thus increase land-use conflicts.

A final factor which could significantly affect future drilling/production operations in the Upper Ojai is the opening of large blocks of land in the U.S. Forest for oil exploration. Figure 8 illustrates federal lands within the project planning area that are under consideration for oil and gas exploration. A significant acreage is involved. Applications have been received by the Forest Service and Bureau of Land Management for drilling permits on these lands in the past, but as of yet only one has been granted.

No information is available on the extent of probable future development of these lands since applicants are not required to state the number of wells to be drilled or even locate drilling sites. Once a block of land is opened for oil and gas exploration, the oil operator determines where and how many wells he will drill. Environmental studies, which will be completed by the Forest Service in 1980, will evaluate surface and subsurface resources in the oil and gas block areas.



Cumulative Aesthetics/Visual Impacts/Mitigation

Cumulative Setting: The Upper Ojai Valley, as seen from the proposed scenic State Highway 150, has a diverse visual character. At the west end of the valley just before Dennison Grade, wide open views of pastures with occasional orchards and residences characterize the area. Proceeding east, more residential development occurs, particularly near the Summit School where several commercial establishments directly front the highway. Distant views of Sulphur Mountain to the south and the Los Padres National Forest to the north are lessened as the terrain steepens and the oak woodland becomes more dense.

Existing oilfields can be seen just north of the highway on the valley floor near Sisar Creek. Further west, past Koenigstein Road, the valley narrows. Oil well pads and access roads in this area are cut into the scrub/oak hillsides and are visible from the highway.

Newly planted orchards are somewhat changing the visual character of the foothill slopes once covered by native chaparral. The cleared slopes are visible from the highway.

Cumulative Impacts: The visual character of the Upper Ojai Valley, as described above, will be slightly changed as a result of the proposed and probable oil drilling sites, equipment, and access roads. Current oil production area is now basically at the valley floor but could be extended into more visible bluffs and hillsides if proposed and probable projects are developed. The majority of future projects, however, will be located in areas that presently have oil operations.

If residential development expands in the Ojai area, the visibility of presently isolated oil production sites may be increased.

Cumulative Mitigation Measures: Recommendations following the completion of drilling or production operations would include:

- Removal of all equipment and deleterious materials including contaminated or sterile soil.

- Grading modification of pad to recontour the site.

- Cultivation of compacted soil.

- Seeding of area with appropriate indigenous or compatible grasses/shrubs.

- Enforcement of goals and policies of Ojai Valley Area General Plan with respect to oil exploration and development.

Cumulative Air Quality Impacts/Mitigation

Cumulative Setting:* Air quality is of major concern in Ventura County. On a countywide basis, National and State Standards for ozone and for total suspended particulate (TSP) are frequently violated in Ventura County. State standards for sulfates, nitrogen dioxide (NO₂), and lead (Pb) have been infrequently exceeded at some locations.

Pursuant to the Federal Clean Air Act of 1970 (42 U.S.C. 7401 et seq.) and subsequent amendments, all areas of the nation, including Ventura County, are required to prepare and implement a plan to meet each National Ambient Air Quality Standard (NAAQS) "as expeditiously as practicable," but no later than December 31, 1982. Exemptions approved by the Environmental Protection Agency (EPA) Administrator may extend the attainment date for ozone and carbon monoxide to December 31, 1987 (ibid). However, these extensions can only be granted if it is demonstrated that all reasonably available measures have been implemented to control emissions of these two pollutants.

*Tables, plates, and portions of the text for this section from the Ventura County Air Quality Management Plan (Final Draft, March, 1979, and Draft, September, 1978).

Each state is required to prepare a detailed State Implementation Plan (SIP) demonstrating how specific air quality standards are to be met. In order to prepare the SIP for California, all regions that have exceeded the most stringent of any national or state air quality standard must prepare an Air Quality Management Plan (AQMP) for implementing a regional strategy to attain and maintain the NAAQS and, in conformance with adopted state policy, to attain the California standards. Ventura County is one such region. The goal of the Ventura County AQMP is to attain the national and state air quality standards as expeditiously as practicable. Since the AQMP shows that Ventura County will be unable to meet the national ozone standard by 1982, even with implementation of all "reasonable available control measures," the county has requested the five-year extension from EPA.

Smog (oxidant) is the air pollutant of major concern in Ventura County. Smog consists principally of ozone, and ambient smog levels are measured at the Ventura County air-monitoring stations (as elsewhere) as ozone. Smog is hazardous to health, reduces visibility, and causes damage to vegetation and to materials. Each type of smog damage results in accompanying economic costs. Over the past five years, measurements of ambient levels of ozone in Ventura County show concentrations as high as three to four times the NAAQS, with some stations (most frequently those in Simi and Ojai) recording 34 and 16.3 percent of days during "smog season" (roughly May through October) in violation of the standard.

Another pollutant of major concern is total suspended particulates (TSP). Ventura County has been designated a nonattainment area for TSP. During 1973-77, TSP levels at the Ojai monitoring station have exceeded the State Ambient Air Quality Standard of 100 $\mu\text{g}/\text{m}^3$ (daily average) on 5 to 25 percent of the days measured.

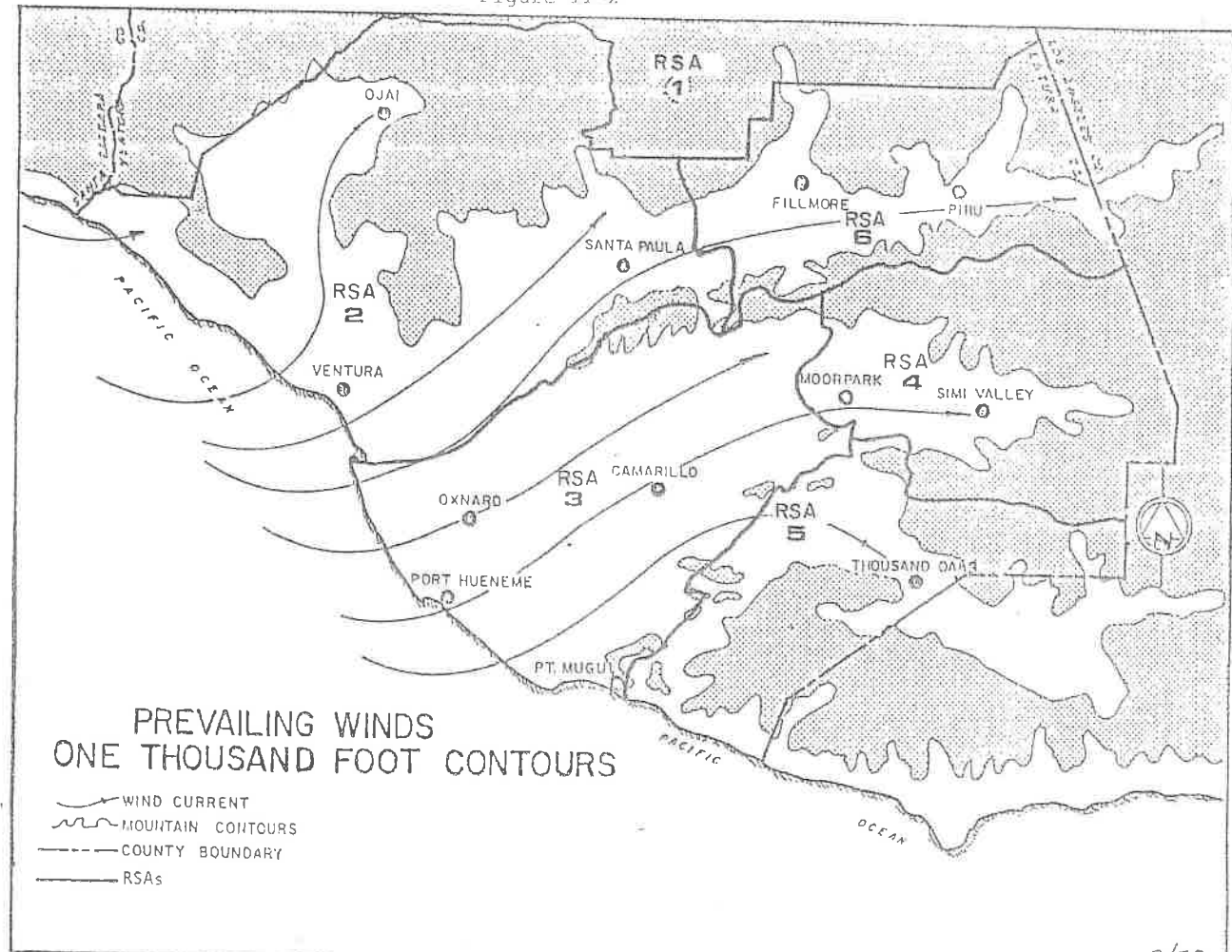
Ambient levels of other pollutants for which there are NAAQS (carbon monoxide, nitrogen dioxide, and sulfur dioxide) are generally substantially below the NAAQS, whereas the federal standard for nonmethane hydrocarbons is probably frequently exceeded throughout the county. These pollutants are considered in this report because it is essential to predict changes in levels of all major pollutants to identify to the fullest extent any impacts of all pollutants on future air quality.

The California standards for sulfate, nitrogen dioxide, and lead have been exceeded on rare occasions and for short durations at Thousand Oaks, Port Hueneme, and Camarillo, respectively. It is suspected that these readings may derive from instrumental or localized meteorological anomalies, and their causes are currently being investigated.

Daytime westerly winds (winds that blow from a western quadrant) are very common in Ventura County during smog season. Photochemical reactions occur among the RHC and NO_x emissions that are diluted into the airstream as the sea breeze moves inland over sources of fresh emissions. For complex reasons associated with chemical reaction rates involved in smog formation during transport, emissions that are mixed into the airstream from about 6 a.m. to 9 a.m. in the morning are of principal importance in defining peak levels that can be expected in inland areas.

The canopy under which smog is contained during formation and transport is due to temperature inversion phenomena, explained briefly as follows. Normally, air cools as it rises, but under certain atmospheric conditions a layer of warm air fails to cool at the usual rate, and cooler air, rising from below, cannot penetrate this layer and is trapped and becomes stagnant. This is known as "inversion." Emitted air pollutants are trapped beneath the inversion canopy and accumulate, unless the inversion breaks up or the wind currents are strong enough to disperse the pollutants horizontally. Inversions commonly occur at about 800 to 1,000 feet above the ground and are most persistent during smog season. A typical inversion covers every populated area of the county and all major sources of air pollution emissions. Prevailing daytime winds and 1,000-foot contours serving to confine pollutants under inversion conditions are shown in Figure 9.

Figure II-2



Source: "AQMP", VCERA

Figure 9

The Ojai Valley is ventilated primarily by winds blowing up the Ventura River; however, the winds diminish considerably as they arrive, leaving the valley poorly ventilated. The frequent inversion lids and poor ventilation combine to cause high levels of pollutants in the valley.

The sources and quantities of air pollutants are given in Figure 10, the updated 1977 countywide inventory of emissions that serves as the baseline emission data for the AQMP.

Pie diagrams showing the percent distribution of current emissions from major source categories are given in Figure 11. About 45 percent of RHC emissions and about 40 percent of NOx emissions are produced from operation of motor vehicles; the remainder are derived from stationary sources. Over three quarters of the county's TSP arise from areawide, open-air activities, such as farming operations, surface dust generated by winds and vehicles on unpaved roads, construction and demolition operations, emissions from vehicle operations, and open-air fires. The major stationary source of TSP is the operation of powerplant boilers fired with fuel oil.

Table 7 summarizes historical pollutant levels as measured at the Ojai air quality monitoring station. This table emphasizes the problems with ozone and TSP in the Ojai area. The problems with these pollutants extend countywide as noted previously.

Pollutant levels recorded at the Ventura County APCD air-monitoring station in Ojai are considered representative of the levels throughout the study area (and the permit area).

The AQMP includes the following controls:

All Air Resources Board (ARB) and EPA Defined Reasonable Available Control Measures (RACM's). RACM's are defined as control measures which are technoeconomically justified and amenable to a compliance schedule. These measures control certain stationary and area sources of air pollution, e.g., gasoline vapors, petroleum refining, and architectural coatings. Implementation of these and previously adopted controls provide for an annual incremental decrease in emissions. This is known as reasonable further progress.

An Annual Motor Vehicle Inspection Program (MVIP). This program, required by the CAAA, will be implemented by the state. Inspection and maintenance programs are designed to identify vehicles which are gross polluters and cause these vehicles to be adjusted or repaired to meet reasonable emission standards.

A Commitment to Define an Emission Reduction Target for the Transportation Sector. Local agencies have also agreed to study transportation control measures and develop implementation schedules for those measures locally determined to be reasonable.

Cumulative Impacts: Previously in this document, existing, proposed, and probable levels of oil well development were discussed. From information and assumptions presented in the previous section and other portions of this report, a cumulative air quality impact analysis was developed. Cumulative air quality calculations were performed for both a high find production scenario and a medium find scenario. Assumption and calculations for the high find scenario are presented in Appendix E; medium find assumptions and calculations are presented in Appendix F.

Table 8 demonstrates that, while uncontrolled emissions exceed the relevant AQMP allocations in some instances, emissions with BACT can be accommodated within the allocations in all but two instances. This occurs in 1980 under both the high find and medium find scenarios where reactive hydrocarbon emissions exceed the allocations. Thus under the high find and medium find scenarios assuming production in 1980, cumulative project emissions cannot be accommodated. However, if it is assumed that production begins in 1981, cumulative stationary source allocations can be accommodated for both scenarios within the Ojai Nongrowth Area.

EMISSIONS INVENTORY FOR VENTURA COUNTY - 1977					
(TONS PER YEAR)					
EMISSION SOURCE CATEGORY	REACTIVE HYDROCARBONS (RHC)	OXIDES OF NITROGEN (NO _x)	SULFUR DIOXIDE (SO ₂)	TOTAL SUSPENDED PARTICULATE (TSP)	CARBON MONOXIDE (CO)
1. PETROLEUM					
A. PRODUCTION	2,007	6			1
B. REFINING	71	45	5	9	16
C. MARKETING	1,486				
D. PETROLEUM COMBUSTION	335	6,912	15	61	1,179
2. ORGANIC SOLVENT USERS					
A. SURFACE COATING	1,738			8	
B. DRY CLEANING	(NEG)				
C. DEGREASING	1,390				
3. CHEMICAL				1	
4. METALLURGICAL			2	9	5
5. MINERAL				250	
6. FOOD & AG. PRO.	254			11	
7. PESTICIDES	4,614				
AG. RES.	725				
8. WOOD PROCESSING					
9. COMBUSTION OF FUELS					
A. POWER PLANTS	604	8,844	18,822	1,573	977
B. OTHER INDUSTRIAL	72	897	43	35	45
C. DOMESTIC & COMMERCIAL	66	826	2	82	163
D. ORCHARD HEATERS	798			2	
10. WASTE BURNING					
A. AGRICULTURAL DEBRIS	205	1		225	1,786
B. FOREST MANAGEMENT	(1)	(1)	(1)	(1)	(1)
C. RANGE IMPROVEMENT	(1)	(1)	(1)	(1)	(1)
D. DUMPS					
E. CONICAL BURNERS					
F. INCINERATORS	(NEG)	(NEG)	(NEG)	(1)	(1)
G. OTHERS	(1)	(1)	(1)	(1)	(1)
11. MISCELLANEOUS AREA SOURCE					
A. WILD FIRES	132	264	(NEG)	2,249	17,189
B. STRUCTURAL FIRES	10	5	(NEG)	72	309
C. FARMING OPERATIONS				5,029	
D. CONST. & DEMOL.				1,705	
E. UNPAVED ROADS				2,131	
F. UTILITY EQUIP: MOWERS, ETC.	160	14	(NEG)	5	1,350
TOTAL, STATIONARY	14,678	17,314	18,889	13,457	23,019
12. MOTOR VEHICLES - ON ROAD	13,277	11,665	613	1,549	125,130
13. JET AIRCRAFT	212	112	47	170	470
14. PISTON AIRCRAFT	372	50	2	7	1,837
15. RAILROADS	49	199	32	15	69
16. SHIPS	2	4	4	5	4
17. OTHER OFF-ROAD VEHICLES					
TOTAL, MOBILE	455	613	392	58	5,094
TOTAL, ALL SOURCES	14,367	12,643	19,990	1,804	132,604
	29,045	29,957	19,979	15,261	155,623

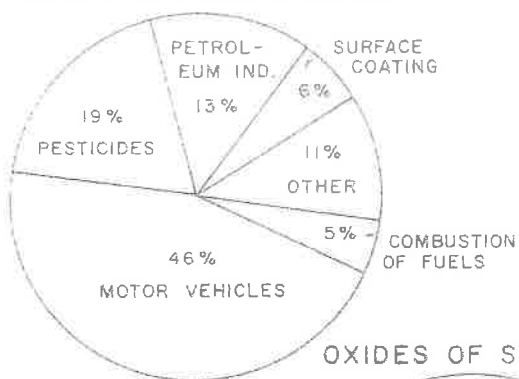
(1) INSUFFICIENT DATA

Source: "AQMP", VCERA

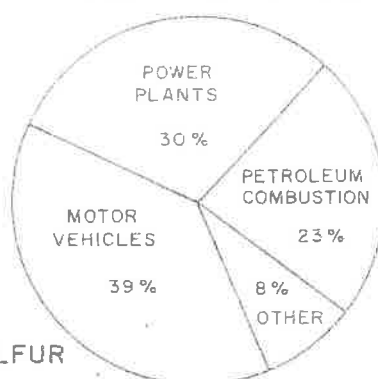
Figure 10

VENTURA COUNTY 1977 EMISSION INVENTORY

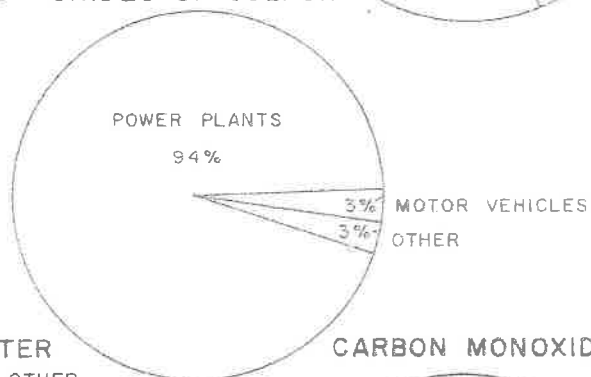
REACTIVE HYDROCARBONS



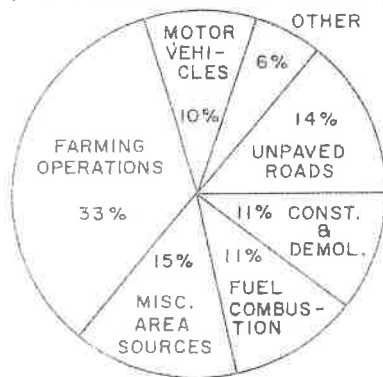
OXIDES OF NITROGEN



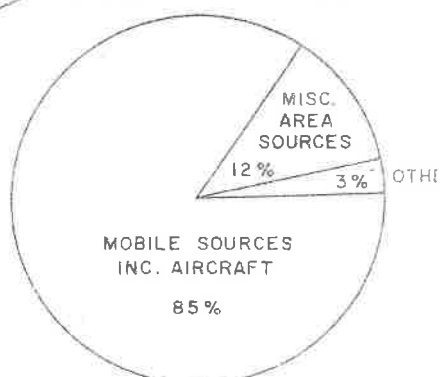
OXIDES OF SULFUR



PARTICULATE MATTER



CARBON MONOXIDE



Source: "AQMP", VCERA

TABLE 7

HISTORICAL POLLUTANT LEVELS IN OJAI VALLEY
STUDY AREASource: "AQMP", VCERA, 1978.
for OJAI MONITORING STATION

Pollutant	OJAI MONITORING STATION Measurement reading	Federal Standard	State Standard
Ozone (O ₃)	Hourly Average -Highest reading (6/29/74): .22ppm -2nd highest reading (6/29/74): .21ppm	.12ppm	.10ppm
Total Suspended Particulate (TSP)	24 Hour Average -Highest reading (8/20/73): 220 g/m ³ -2nd highest reading (10/7/73): 158 g/m ³	260 g/m ³	100 g/m ³
	Annual Geometric Mean	75 g/m ³	60 g/m ³
	-1972 73 g/m ³		
	-1973 66 g/m ³		
	-1974 57 g/m ³		
	-1975 74 g/m ³		
	-1976 59 g/m ³		
Carbon Monoxide (CO)	8 Hour Moving Average	9ppm	-
	-1974 Highest 8.7ppm		
	-1974 2nd highest 7.5ppm		
	Hourly Average	35ppm	40ppm
Nitrogen Dioxide (NO ₂)	-1972 Highest 12ppm		
	-1972 2nd highest 12ppm		
	Hourly Average	-	.25ppm
	-1972 .19ppm		
	-1973 .12ppm		
	-1974 .09ppm		
	Annual Average	.05ppm	-
Sulfur Dioxide (SO ₂)	-1972 .01ppm		
	-1973 .02ppm		
	-1974 .01ppm		
	Annual Average	.03ppm	-
	-1977 .01ppm		
	24 Hour Average	.14ppm	.05ppm
	-1977 .03ppm		
	1 Hour Average	-	0.50ppm
	-1977 .06ppm		

TABLE 8

SUMMARY AND COMPARISON OF OJAI NONGROWTH
AREA EMISSION ALLOCATIONS VS. STATIONARY SOURCE
TOTAL CUMULATIVE EMISSIONS FOR
NONATTAINMENT POLLUTANTS
(tons per year)

	<u>Emission</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
<u>AQMP Allocations¹</u>	-RHC	19.0	20.0	172.0	235.0
	-NOx	23.0	25.0	305.0	495.0
<u>Cumulative High Find²</u> <u>Scenario for Ojai Nongrowth</u> <u>Area--Oil Production Only</u>					
1. Assuming first year of production 1980:	<u>RHC</u>				
	-uncontrolled	---	555.2	863.7	615.7
	-w/BACT	---	80.9	123.9	99.1
	<u>NOx</u>				
	-uncontrolled	---	62.1	104.2	104.2
	-w/BACT	---	18.6	31.3	31.3
2. Assuming first year of production 1981:	<u>RHC</u>				
	-uncontrolled	---	---	555.2	863.7
	-w/BACT	---	---	80.9	123.9
	<u>NOx</u>				
	-uncontrolled	---	---	62.1	104.2
	-w/BACT	---	---	18.6	31.3
<u>Cumulative Medium Find³</u> <u>Scenario for Ojai Nongrowth</u> <u>Area--Oil Production Only</u> <u>Including Petroleum Truck</u> <u>Transport of all Oil</u> <u>Production</u>					
1. Assuming first year of production 1980:	<u>RHC</u>				
	-uncontrolled	---	214.0	276.4	232.8
	-w/BACT	---	44.8	57.8	53.0
	<u>NOx</u>				
	-uncontrolled	---	59.9	89.4	87.6
	-w/BACT	---	23.4	33.8	32.0
2. Assuming first year of production 1981:	<u>RHC</u>				
	-uncontrolled	---	---	214.0	276.4
	-w/BACT	---	---	44.8	57.8
	<u>NOx</u>				
	-uncontrolled	---	---	59.9	89.4
	-w/BACT	---	---	23.4	33.8

¹For Ojai Nongrowth Area. Source: Ventura County AQMP, Tables V-9 and V-10.

²Derived from factors presented in Appendix E, utilizing additional assumptions as indicated in Table 13, Footnote 3.

³Derived from factors presented in Appendix F, utilizing additional assumptions as indicated in Table 13, Footnote 3.

Cumulative Mitigation Measures:

General Emissions Control - In the preceding section, emissions from stationary sources was determined to be significantly reduced if BACT was applied. In consideration of the AQMP New Source Review Rules, all new oil developments will be required to apply BACT for stationary sources as identified previously.

Emissions from sources not specifically controlled under New Source Review Rules can be reduced as described following.

Consideration should be given to limiting the drilling operations to one operating rig at a time in the permit area, especially on days of adverse air quality. While this may prolong the total project, it would substantially reduce day-to-day project emissions.

Other measures should be implemented to reduce fugitive emissions from petroleum handling and transportation as contained in the county's standard oil permit conditions. These are as follows:

- No venting of well head gas to the atmosphere shall occur. If quantities of gas exist in excess of that needed to power production equipment, the gas should be flared in a manner acceptable to APCD, the Ventura County Fire Chief, and the Planning Director.
- That producing well equipment be routinely maintained in a manner representative of good oil industry practices.
- That all valves, flanges, and connections should be routinely maintained.
- Additional possible mitigation measures affecting air quality are identified in the Ojai Valley Area Plan Draft EIR in the plans for Goal 1.

If an electrical source with sufficient capacity is available and if noise levels are an important consideration at a probable future drilling/production site, electric drilling rigs are possible. This would eliminate a considerable amount of emissions, during the drilling phase, generated from the 11 diesel engines used to power the drilling rig. The electrical demand from the electric drilling rig would be approximately 1,400 kilowatts on a 24-hour per day basis for the length of the drilling phase (approximately 60 days). Electricity is obtained from powerlines to run electrical drilling motors. These rigs can be used only where there is a substantial electrical supply available. They are not used in rural areas at all, since the power requirements are usually much more than a rural system can accommodate. Also, electric drilling rigs are scarce. There may only be a few in the entire state. The use of an electrical drilling rig for future projects does not appear feasible.

The potential impact from dust during the construction of the drilling sites and access roads can be substantially reduced by keeping the earth sufficiently watered to suppress dust. Watering normally achieves up to 50 percent reduction in fugitive dust emissions. Also, vehicle speed should be kept to a minimum (less than 15 mph) to reduce dust.

The greatest continuing source of emissions during the production phase results from gas-fired pumping equipment. However, gas-fired pumping equipment emissions are exempt from consideration under the emissions allocation program of the AQMP. To reduce emissions from gas-fired powered pumping equipment, the applicants should consider using electrically powered pumping equipment if at all possible.

Emissions Offset Possibilities - Even though the site specific emissions of a proposed project may not exceed the AQMP allocations for the Ojai Nongrowth Area, future air quality considerations may make emissions offsets desirable. The potential to partially or completely offset a project's stationary source emissions (which are subject to allocation) must be evaluated separately for each CUP application in the county and in the areas where offsets are allowed under the AQMP.

Oil Pipeline Considerations - Some reductions in emissions from transfer facilities and truck transporting may be realized by the use of major oil transfer pipelines in lieu of trucking. The present options for oil pipelines appear to be 1) to expand the existing ARCO pipeline, and 2) to construct new oil transfer pipelines for individual permits or operations.

A definitive determination of whether the existing ARCO pipeline can be expanded would require a detailed engineering investigation. As discussed previously, however, the pipeline may be able to transport up to 20,000 barrels of oil per day if additional pumping capacity is added at the points of connection and the viscosity of the crude is similar to that which now flows through the pipe. Apparently, the capacity could be expanded to handle the high find cumulative scenario of oil development.

The high find air quality estimate was made based on the various operators' desires with respect to utilizing pipelines. Most operators indicated that they wanted to utilize the ARCO pipeline, and this was taken into account in the high find emissions calculations. Small additional emissions reductions could be realized if all operators in the Ojai Valley were required to export oil via a pipeline rather than trucking. For the high find scenario, about 32 tank truck trips per day could be eliminated which could reduce cumulative RHC and NOx emissions by about 13 and 38 pounds per day, respectively. Also, the impact of trucking on local traffic would be improved significantly.

The high find scenario air quality calculations have been made on the assumption that a pipeline would be constructed, thus they reflect emissions reductions obtained from shipping oil via pipeline as opposed to shipping it via tank truck. Medium find scenario calculations assumed that no shipping pipeline would be constructed; however, emissions were determined to be lower than the high find scenario.

Emissions from the flaring of excess natural gas can be reduced through the use of facilities and pipelines to transport the gas to a processing plant. Present available capacity in the existing 5-inch ARCO gas pipeline is more than double its present flow rate of 171,590 MCF.

Cumulative Biological Impacts/Mitigation

Cumulative Setting: In a regional context, the CUP-3543 project area is identified both with the Upper Ojai Valley proper which drains to the west as part of the Ventura River, and with Sisar Creek which turns eastward from the low flat divide to join Santa Paula Creek and the Santa Clara River watershed. Although the CUP-3543 project sites are within the Sisar Creek drainage, the general area is still known as Upper Ojai Valley.

The Upper Ojai Valley is typical of valleys within the interior coastal ranges of Southern California, displaying a variety of biotic communities.* The valley is relatively broad and transverses the surrounding mountains in an east-west direction. South-facing slopes are covered by chaparral while north-facing slopes are covered by oak woodland. Generally, the valley floor has been converted to agriculture and ranching, although small isolated patches of native chaparral and oak woodland remain. The creeks, which drain the valley, also support oak-riparian communities.

The coastal mountains of Ventura County contain some of the most rugged terrain found in California. Cultural developments are confined primarily to the valleys and foothill slopes. The CUP-3543 sites are located on south-facing foothill slopes near the southern boundary of the Las Padres National Forest. The immediate area to the north has no developed roads. A few four-wheel drive type service roads penetrate a short distance only. The western boundary of the Sespe Wildlife Area, which contains the Condor Refuge, lies some 6 miles to the northeast, along the divide between Santa Paula Canyon and the West Fork Sespe Creek.

Cumulative Impacts: Cumulative impacts of all proposed and probable oil drilling/production activities on the south-facing slope of the Upper Ojai Valley (the general CUP-3543 area) upon the flora and fauna will not be significant. The impacts will be determinable but future development will occur in areas that have already been impacted to a greater or lesser degree.

Implementation of the proposed project, however, would contribute incrementally to the increasing loss of biological resources and natural ecological setting now taking place within the Upper Ojai Valley. In addition to oil-related activities, loss of habitat would occur as a result of ongoing residential and agricultural developments. Eventually, this trend and the attendant losses of biological resources would become significant resulting in irreversible losses in the ability of habitats to support and "hold" wildlife populations. At that point in time, many wildlife species would be lost from the valley entirely.

Here again, each incremental loss adds to the total of all losses of biological resources within the area and the point at which "insignificant" becomes "significant" depends upon the judgment of each individual making such an evaluation.

Potential oil spills from CUP-3543 activities are an ever-present possibility and under the most adverse conditions could adversely impact Sisar and/or Santa Paula Creeks. From a realistic viewpoint, however, there is very little likelihood that a spill from one of the two sites or from the proposed pipeline would cause significant damage to the environment before the leakage was detected and remedial action was taken to rectify and control the situation.

Cumulatively, the potential impact of oil spills within the Upper Ojai Valley would be the same (as described above) with the order of risk and the potential for damage increasing roughly proportional to the increase in pumping units, the amount of oil pumped, and new flow lines.

Cumulative Mitigation Measures: As a measure to counteract the cumulative impact of oil operations in the Sisar Creek/Bear Creek habitat, it is recommended that a task force be created to recommend to the Board of Supervisors means of minimizing the impact of present and future oil operations in the habitat. The task force would recognize both the need for oil resources and

*Biotic communities are assemblages of plant and animal species occurring within the same physical habitat in a predictable manner and having a complex set of interrelationships.

the unique wildlife resources of the Sisar Creek/Bear Creek areas. The task force would be comprised of a representative of the oil industry, the planning department, public works, State Fish and Game, and the County Parks Department. The task force would be chaired by the planning department.

The California DFG is extremely concerned about the effects of erosion upon stream channels and in somewhat similar circumstances has prohibited side-casting required riprapping and/or the installation of culverts where the roadway was within the flood channel and required erosion control on roads some distance from stream channels. In this connection, the California DFG will probably require a permit under Section 1603 of the Fish and Game Code covering possible alterations to a streambed. The California DFG applies Section 1603 to both intermittent and permanent streams.

Cumulative Groundwater Impacts/Mitigation

Cumulative Setting: Groundwater from beneath the Upper Ojai Valley is used for both domestic and agricultural demand. Due to the greater availability and quantity of water within the groundwater basin and the distance of the proposed drill sites from the basin, the threat of contamination from the use of drilling fluid is low.

In California, exploratory oil wells are drilled under the jurisdiction of the DOG. In order to protect against groundwater contamination during drilling operations, casing and cement are utilized to prevent communication between groundwater and oil production zones, as required by regulations of the DOG. Several casings are required. A conductor casing is the largest casing and is normally installed to a depth of 100 feet. A surface casing is the next casing and is generally installed to a depth of 10 percent of the proposed depth. A second string of surface casing may be required if the first string has not been cemented into a competent zone. The lengths of casing are nonporous material, usually metal, and are cemented at the joints to provide a continuous barrier. An intermediate casing may be required to provide additional protection to freshwater zones and to seal off anomalous pressure zones, lost circulation zones, and other drilling hazards. The final casing is the production casing, which is cemented and tested for fluid shutoff above the zone or zones to be produced. *Drilling fluids used to drill oil wells are the same as those to drill water wells.*

In addition, the DOG requires a continuous annular cement seal from ground surface to the base of freshwater, as indicated on the electrical well log. This is accomplished by pumping cement into the annular space between outside of the surface casing and the borehole. High pressure grouting is sometimes required because the cement has to fill in the fissures and fractures through which the borehole has been drilled. Cement is required in the annular space from the bottom of the surface casing, continuously to the surface. According to the county hydrologist, because of pressure tests performed on the sealed casing strings and inspection by DOG personnel, it is believed that pollution of fresh groundwater will not occur after the freshwater annular seal is in place.

The greatest fresh groundwater pollution potential for any well is present prior to placement and sealing of casing to the base of freshwater. During this initial period, which the DOG indicates requires several days to a week to complete, the uncased borehole is exposed to drilling fluid which consists of clay-gel drilling mud and water. The clay-gel drilling mud and water-fluid mixture is used to prevent caving of the borehole, carry cuttings to the surface, lubricate and cool the drill bit, and prevent substantial fluid losses. Large fluid losses can result in "loss of circulation" and collapse of the borehole. As a result, oil companies carefully monitor any fluid losses and strive to prevent substantial losses by adding more clay-gel or other similar amendments to the drilling fluid. Drilling fluids used to drill oil wells are the same as those to drill water wells. *at least my suggestion.*

According to the DOG, the water used to prepare drilling fluid in the Sisar Creek area is freshwater purchased from local well owners or transported to drilling sites by truck. If this is the case, degradation of the mineral quality of groundwater is not possible until rock units yielding saltwater are penetrated.

*add
extra casing*

Cumulative Impacts: Contamination of adjoining surface water or groundwater supplies by loss of drill fluids or by improper cementing of the surface seals is not considered likely because (a) the limited quantities of fresh groundwater in the formations; (b) the drilling fluids utilized would prevent fluid loss; (c) the wells would be drilled with freshwater; and (d) as necessary, the annular space would be sealed from ground surface to the base of the freshwater zone.

Cumulative Mitigation Measures: Mitigation measures that would ensure that there would be no significant contamination of surface or groundwater are:

All drilling fluids and drill cuttings should be confined within the drill site by means of mud tanks and berms. No surface waters should be contaminated.

Subsurface waters should be protected by casing and cement to prevent communication between zones, as required by regulations of the DOG.

In order to protect groundwater during oil production, the casing strings should be cemented in place and water shutoff tests should be conducted and witnessed in accordance with the regulations of the DOG.

All liquid drilling discharge wastes should be accumulated in steel tanks within the permit area and hauled away from the property for disposal at an approved disposal site, and such steel tanks should be removed within 30 days after completion or abandonment of the subject wells. However, solid drilling waste materials could be temporarily deposited in an earthen depression with the final disposition of said solid waste materials to be accomplished in compliance with the rules and regulations of the California RWQCB, Los Angeles Region.

Suitable and adequate sanitary toilets and washing facilities, approved by the Environmental Health Division, should be installed and maintained in a clean and sanitary condition at all times during periods of drilling.

Disposal of all potentially hazardous wastes, as defined in Sections 60001 through 60180 of Title 22 of the California Administrative Code, should be by a means approved by the Ventura County Environmental Health Department and the RWQCB, Los Angeles Region.

Any abandoned water wells on the drilling site should be destroyed in accordance with the Ventura County Well Ordinance.

Any oilspills from pipes, other facilities, or the well should be cleaned and corrected in accordance with the Environmental Protection Agency's (EPA) Spill Contingency Plan.

Relax
The initial hole should be drilled only to the base of freshwater with freshwater mud and continuously sealed with a casing and cement annular seal prior to drilling deeper. The base of freshwater can be estimated by evaluation of other electric logs in the area or by continuous recording of the electrical conductivity of drilling mud.

Fluid losses should be monitored onsite during drilling with the use of an approved tracer.

Cumulative Traffic Impacts/Mitigation

Cumulative Setting: Koenigstein Road is a narrow, single-lane roadway that is paved for approximately 1.75 miles and extends more or less up into Bear Canyon. On the lower portion, Koenigstein Road has a pavement width of about 12 feet, whereas the upper portion has an approximate pavement width of 32 feet for about 1/4 mile, narrowing to between 12 and 18 feet for approximately 1 mile. There are two small bridges over creek drainages, one at the road's intersection with Highway 150 and one on the widened portion. Information presented in the 1978 Road Index Inventory for Ventura County indicates that no official ADT counts or design capacities are presently available. There are, however, roughly 25 homes along the entire stretch of Koenigstein Road, many of which are along the lower portion. Assuming 10 trips per day per home as a "worst case" traffic estimate, the ADT could be estimated at 250 plus oilfield traffic.

State Highway 150 is a two-lane rural minor arterial highway roughly traversing the center of the Upper Ojai Valley. It has been designated a scenic highway by the state and a proposed scenic highway by the County Scenic Highways Element. The highway occupies a 60-foot right-of-way with an average pavement width of 18 to 20 feet (telecon, Dick Drosendahl/Bob Kleges, Caltrans, July 26, 1979). The suggested travel speed is 55 miles per hour, unless otherwise indicated. The travel speed near Koenigstein Road is 35 miles per hour.

Information from Caltrans (1978 Traffic Volumes on California State Highways) reveals that the annual ADT along Highway 150 between the cities of Ojai and Santa Paula ranges between 6,000 ADT (recorded east of Ojai) to 2,900 ADT (recorded north of Santa Paula). Caltrans indicates that 2,900 ADT most accurately reflects the existing level of traffic on Highway 150 in the Upper Ojai Valley.

Caltrans data for the three-year period 1976-1978 indicates that 114 accidents have occurred along Highway 150 between Ojai and Santa Paula (post miles 22.481 to 31.26). Of these accidents, only six involved vehicles classified, truck tractor with trailer, or in other words may have been oil-related heavy truck traffic. This number represents only 3.5 percent of the total, whereas 76.1 percent of the accidents involved passenger cars, passenger cars with trailers, and motorcycles. Accident data provided by Caltrans of the actual number of accidents occurring along this portion of Highway 150 represents a rate of 3.31 accidents per million vehicle miles (MVM). Estimates made by Caltrans for the "expected accident rate" of a roadway similar to Highway 150 is 2.96, illustrating that Highway 150, along this portion of the roadway, has involved a greater accident rate than expected for this type of roadway. However, in reviewing the percentage of accidents involving large vehicles, it is noted that they account for a small number overall.

Cumulative Impacts: The total amount and type of traffic that could be generated by the existing, proposed, and probable drilling and production in the Upper Ojai Valley is summarized in Table 9. Refer to Appendix H for calculations and discussions of values used to arrive at the cumulative project generated traffic figures.

In evaluating existing production phase traffic, eight petroleum companies presently operating in the Ojai Valley are shipping production oil via oil tankers to appropriate processing facilities. It is important to note here that the calculated ADT reflects those vehicles required to adequately service all production wells in the Upper Ojai Valley.

TABLE 9
CUMULATIVE PROJECT-GENERATED TRAFFIC

	Existing ¹		Proposed ²		Probable ²		Cumulative	
	Vehicle Type	ADT	Vehicle Type	ADT	Vehicle Type	ADT	Vehicle Type	ADT
Drilling Phase			Passenger	40.0	Passenger	60.0	Passenger	100.0
			Vacuum	2.0	Vacuum	4.0	Vacuum	6.0
			Truck Trans-		Truck Trans-		Truck Trans-	
			port	0.6	port	1.2	port	1.8
			Mud Truck	0.5	Mud Truck	1.0	Mud Truck	1.5
			Pipe Truck	0.2	Pipe Truck	0.40	Pipe Truck	0.6
Production ³ Phase	Passenger	454.0	Passenger	10.0	Passenger	92.0	Passenger	576.0
	Pickup Truck	72.0	Pickup Truck	16.0	Pickup Truck	56.0	Pickup Truck	146.0
	Tank Truck (existing)	7.0						
	Tank Truck (future)	3.0	Tank Truck	14.0	Tank Truck	18.0	Tank Truck	35.0

¹ Analysis of existing drilling phase traffic not applicable here, since all wells are in a producing mode.

² The calculated ADT for proposed drilling and production phase traffic assumes only three wells can be drilled at any one time due to the current state shortage of drilling rigs.

³ ADT values determined for tank trucks assume that pipelines will be installed within six months of initial drilling/production testing activities.

The determination of the ADT for both proposed/probable drilling operations is based upon the following assumptions:

ADT levels reflect the short-term nature of drilling operations.

Only three wells are expected to be drilled at any one time. The number of wells that can be drilled are a function of drilling depth, the current shortage of drilling rigs in California, and economic considerations which directly affect the market value of crude oil.

Traffic resulting from proposed and probable production activities was analyzed in terms of a "high find" or maximum production scenario. The determination of proposed production phase ADT values was based on information provided by the applicants. It included the number of requisite personnel to operate/maintain production facilities and also, anticipated production (in barrels per day). Similarly, a combination of data from Table 10 as well as assumptions concerning future personnel needs was utilized in calculating ADT values during the probable production phase.

Future ADT projections could be well under those indicated in Table 11 if the production phase does not proceed in accordance with initial assumptions. Therefore, this scenario should not be considered to be a prediction of future conditions; it is a possible situation, not necessarily a probable future.

According to information presented in the Final EIR for CUP-3653, August, 1978, it is anticipated that the majority of the additional traffic generated during proposed and probable drilling/production phases would travel east-bound (towards the city of Santa Paula) along State Highway 150.

Based on the number of existing, proposed, and probable production well sites, it is estimated that 15 percent of the cumulative ADT could occur along some portion of Koenigstein Road (with 100 percent or all traffic ultimately proceeding onto State Highway 150). The following existing and projected ADT values have been calculated for State Highway 150 and Koenigstein Road.

TABLE 10
EXISTING ADT (1978)

	<u>Non-Oil Traffic¹</u>	<u>Oil Traffic</u>	<u>Total Traffic</u>
Koenigstein Road ²	250.0	70.0	320.0
State Highway 150	2,364.0	536.0	2,900.0

¹ADT values for Koenigstein and State Highway 150 provided by the Public Works Agency, Ventura County.

²The amount of ADT indicated for Koenigstein Road is the number which could possibly use some portion of the roadway. It is a policy of the County of Ventura to prohibit use of the lower portion of Koenigstein Road by heavy-duty oil traffic.

TABLE 11
PROJECTED ADT (1985)

	Projected Non-Oil Traffic ¹	Projected ² Oil Traffic	Existing Oil Traffic	Cumulative Traffic (1985) ³
Koenigstein Road	256.0	54.0	79.0	389.0
State Highway 150	2,421.0	364.0	536.0	3,321.0

¹Projected ADT values for non-oil traffic on Koenigstein Road and State Highway 150 reflect 0.4 percent rate of growth increase.

²Projected ADT values for oil traffic include cumulative drilling/production ADT counts.

³Projected ADT values for cumulative traffic represent the summation of projected non-oil traffic and existing/projected oil traffic.

Qualitatively, additional traffic along Koenigstein Road will significantly increase the potential for accidents as well as inconveniencing existing residential traffic. Congestion problems are anticipated along narrow/winding stretches of this road. With regard to State Highway 150, it appears that the projected increase in traffic levels will not exceed its given design capacity.

Cumulative Mitigation Measures: Heavy-duty truck traffic from cumulative oil operations could be virtually eliminated if operators would utilize oil pipelines to transport crude oil offsite in place of tank trucks. If a unique arrangement between operators financing pumping capacity in the ARCO pipeline could be arranged, this could serve to significantly reduce oil-related traffic in the area.

Cumulative Noise Impacts/Mitigation

Cumulative Setting: Measurements have been obtained and analysis has been performed to assess the level of preparation, drilling, production, and abandonment activity noise as it relates to cumulative projects. The measurements and analysis have been used to assess the potential impact of the expected noise on the residential locations in proximity to the proposed and probable drilling sites and along the roadways which will be used to gain access to the sites.

A-Weighted Sound Level - The scale of measurement which is most useful in community noise measurement is the A-weighted sound pressure level, commonly called the A-level or db(A). It is measured in decibels to provide a scale with the range and characteristics most consistent with that of people's hearing ability.

Community Noise Equivalent Level - It is recognized that a given level of noise may be more or less tolerable, depending on the duration of exposure experienced by an individual. The State Department of Aeronautics and the California Commission of Housing and Community Development have adopted the Community Noise Equivalent Level (CNEL). This measure considers a weighted average noise level for the evening hours, 7 p.m. to 10 p.m., increased by 5 dB and the late evening and morning hour noise levels, from 10 p.m. to 7 a.m., increased by 10 dB.

Exterior noise exposures at residential locations in general should not exceed a CNEL of 65 dB. Land use regulations adopted by cities and counties throughout California consider this as the maximum acceptable level for exterior living spaces.

Noise Insulation Standards were officially adopted by the California Commission of Housing and Community Development in 1974. The ruling states that "Interior Community Noise Equivalent Level (CNEL) attributable to exterior sources shall not exceed an annual CNEL of 45 dB in any habitable room."

The significant noise-producing elements to be created by the proposed project involve vehicle traffic movements on the roadways within the study area and the various equipment operations at the drill site.

Table 12 indicates the existing and projected ADT estimated for non-oil related activities and those associated with the existing and projected accumulation of oil drilling and production activity (expected by 1985). The noise exposure CNEL estimated at a distance of 50 feet from the near center lane of the roadway is also indicated in the table.

TABLE 12
EXISTING TRAFFIC NOISE CHARACTERISTICS

Roadway	Distance to CNEL Contour From Near Lane Center		
	65 dB (feet)	60 dB (feet)	55 dB (feet)
<u>Existing (with non-oil and oil related activity)</u>			
Highway 150	40	105	250
Koenigstein Road	--	30	85

Cumulative Impacts:

Highway 150 - The impact of traffic noise for the existing conditions is considered minimal to significant depending on the elevation of the residential spaces relative to the arterial and the distance of the exterior space from the roadway. Locations which are 40 feet or less from Highway 150 are significantly impacted by the existing non-oil and oil-related traffic movements. This distance is expected to increase to 55 feet by 1985 (with the project). Table 13 summarizes cumulative traffic impacts.

Koenigstein Road - The existing impact of traffic noise on residential locations is insignificant to minimal for most spaces adjacent to Koenigstein Road. Exterior living spaces (recreation areas, rear yard, play area, etc.), which are within about 30 to 40 feet, will be minimally impacted by the projected non-oil and oil-related activities.

Single-Event Noise Levels of Trucks - Truck passbys, particularly at night, will cause a significant impact at residential locations nearest to the roadways, even though the long-term (CNEL) noise exposures are quite low. The short duration sound levels may approach 80 to 85 dB(A) at the homes nearest to the roadways. These levels may cause sleep interference and the related annoyance associated with such interference. In some cases, noise-sensitive individuals will need to keep their windows closed to minimize the single-event noise of truck passbys.

Drilling Activity Noise - A significant impact may be experienced at night during the drilling and production phase of those future sites near residential locations. Generally, residences within about 800 to 1,200 feet from the drilling operation will experience noise impact if noise control measures are not included in the project design.

Cumulative Mitigation Measures: The application of the following noise standards should be considered for those sites which significantly impact residential locations:

1. Noise Intrusion Into Residential Property From Drilling or Production Operations

The drilling or production operations on the proposed sites should not produce noise, when experienced on residential property in the general vicinity of the operations, that exceeds the following standards:

TABLE 13
ASSESSMENT OF NOISE EXPOSURES
PRODUCED BY VEHICLE TRAFFIC

Roadway	Average Daily Traffic						CNEL** @ 50' From Near Lane			
	Existing			Projected (1986)			Existing		Projected	
	Non-Oil	Oil*	Tank Trucks	Non-Oil	Oil*	Tank Trucks	Non-Oil	With Oil*	Non-Oil	With Oil*
Hwy. 150	2,364	536	7	2,421	900	37	62 DB	64 DB	62 DB	65.5 DB
Koenigstein Road	250	70	4	256	127	10	53	57	53	59

* Existing and projected vehicle movements associated with oil-related activities.

** Community noise equivalent level.

EXTERIOR NOISE STANDARDS

<u>Time Period</u>	<u>Noise Level</u>
7 a.m. to 10 p.m.	55 db(A)
10 p.m. to 7 a.m.	45 db(A)

These standards are applicable measured 5 feet from the exterior wall facing the noise source.

2. Noise Generated by Motor Vehicles on Public Right-of-Way

- a. The applicant should not operate either a motor vehicle or combination of vehicles on public right-of-way within the general vicinity of the proposed sites, at any time or under any condition of grade, load, acceleration, or deceleration, in such a manner as to exceed the following noise limit for the category of motor vehicle within the speed limits specified:

	<u>Speed Limit of 35 mph or Less</u>	<u>Speed Limit of more than 35 mph</u>
(1) Any motor vehicle with a manufacturer's gross vehicle weight rating of 6,000 pounds or more and any combination of vehicles towed by such motor vehicles:	86 db(A)	90 db(A)
(2) Any other motor vehicle and any combination of vehicles towed by such motor vehicles:	76 db(A)	82 db(A)

- b. The noise limits established by this condition should be based on a distance of 50 feet from the center of the lane of travel within the speed limit specified.
- c. Test procedures and instrumentation to be utilized should be in accordance with regulations of the Department of California Highway Patrol.

(Refer to the California Vehicle Code relative to Noise Laws and Regulations.)

The following measures should be implemented to achieve the above noise standards:

Truck movements to and from the proposed sites should be minimized during the evening and early morning hours (7 p.m. to 7 a.m.). In addition, only well-maintained vehicles should be permitted to operate during the various phases of site preparation, drilling, production, and abandonment.

To accomplish the noise reduction required and to minimize or eliminate annoyance at the residential locations, the following mitigation measures should be considered where necessary.

1. Construct the access road to the site(s) at locations furthest from the residential locations.
2. Provide a temporary sound barrier. Specific details concerning appropriate sizing and type of materials for noise barriers are left to the discretion of the project applicant.

3. Place sound treatment around all noise-producing equipment and areas on the rig, such as:

- a. Work platform.
- b. Engine base and draw works.
- c. Main top blocks.
- d. Working board below crown for a height of 7 to 10 feet.

The California Vehicle Code includes a provision concerning the noise produced by motor vehicles. This portion of the code is enforced by noise survey teams located throughout the state. In addition, the U.S. EPA is promulgating a truck noise regulation throughout the country. This regulation may have a significant impact on truck noise by about 1985 to 1987 and a corresponding beneficial impact on traffic noise levels within the study area for both non-oil and oil-related vehicle movements.

If adequate electrical power sources are readily available, consideration should be given to the use of electric drilling rigs to reduce acoustic impacts. Alternatively, provision should be made for the use of muffled diesel engines during the drilling phase.

ORGANIZATIONS, AGENCIES, AND INDIVIDUALS CONSULTED FOR DATA INPUT

This report has been prepared by the Planning Division of the Environmental Resource Agency with assistance from the following sources:

- A. Robert L. Richardson, petroleum engineer, for the applicant
- B. Public Works Agency, County of Ventura
- C. Air Pollution Control District
- D. Ventura County Fire Department
- E. Environmental Health Division, County of Ventura
- F. Lyle A. Kenney, Ventura County Archaeological Society
- G. D.E. Ritzius, California Division of Oil and Gas

*PROJECT CONTRIBUTORS AND
ORGANIZATIONS/PERSONS CONSULTED

PROJECT CONTRIBUTORS

Project Managers

Robert K. Laughlin	Resource Management Agency Environmental Review Section
Steve Chase	Resource Management Agency Planning Division

Ventura County Staff

William Haydon	Ventura County Flood Control District
Bill Lockard	Ventura County Flood Control District
William Frank	Ventura County Public Works Agency
Joe Hannah	Ventura County Public Works Agency
Ron Shepherd	Ventura County Public Works Agency
Walt Schiernbeck	Ventura County Fire Prevention Bureau
Jim Rouge	Ventura County Air Pollution Control District

Project Consultants

Boyle Engineering Corporation

Donald A. Burr, P.E., Managing Engineer
Thomas C. Ryan, Director of Environmental Services
Richard Mauck, P.E., Civil Engineer
Frederick J. Adjarian, Environmental Planner
Elizabeth Papadopoulos, Environmental Analyst

Geotechnical Consultants, Inc. (Report in Technical Volume)

David A. Gardner, C.E.G., Geotechnic Consultant (Cumulative Analysis)

Scott Soule, Biological Consultant (Cumulative Analysis)

J. J. Van Houten, P.E., Acoustical Consultant (Cumulative Analysis)

ORGANIZATIONS/INDIVIDUALS CONTACTED

California Business and Transportation
Agency, Department of Transportation

Charles Koteck

California Department of Fish and Game

Ken Sasaki, Unarmored Threespine Stickelback Recovery Team
Bill Richardson, Inland Fisheries
Jack Spruill, Assoc. Wildlife Manager Biologist
Rich Clack, Wildlife Biologist

California Division of Oil and Gas

Murry Dosch, District Operations Engineer

California Public Utilities Commission

Mrs. Simmerson, Tariffs Department

California Regional Water Quality Control Board

Hubert Kang, Associate Engineer

Phoenix West Oil and Gas Corporation

Ted Off, Applicant's Representative

United States Forest Service

Ken Kestner, Wildlife Biologist

APPENDIX A

COMMENTS AND AGENCY RESPONSE TO DRAFT
OF NOVEMBER 12, 1975

ENVIRONMENTAL
RESOURCE AGENCY

Mr. and Mrs. S. H. Stewart
12617 Koenigstein Rd.
Santa Paula, Ca., 93060
Nov. 20, 1975

Environmental Quality Appeals Committee
Ventura County
625 E. Santa Clara St.
Ventura, California, 93001

Re: EIR for CUP 3543

Gentlemen:

We live on approximately six acres on Bear Creek, a little over one-fourth mile from the proposed project. The purpose of this letter is to appeal the Nov. 12, 1975, action of the Environmental Report Review Committee accepting the adequacy of the Environmental Impact Report for CUP 3543 (Phoenix West Oil and Gas Corp., applicant). We were two of the petitioners at that meeting who pleaded that the report was insufficient and incomplete. We submit this appeal to the Environmental Quality Appeals Committee, and, if unsuccessful at that level, intend to continue the appeal to the Planning Commission, the Board of Supervisors, and, possibly, to the courts.

We, and others whom we support in this action, recognize the local, national, and world need for oil. Our livelihoods currently are dependent upon oil. We also believe, however, that the development of oil should disturb as little as possible other natural resources, and must not infringe on the rights of those now living in the area, the general county residents, and posterity. Fossil fuels have projected limited reserves. It is imperative that sometime in the near future science develop alternative energy sources. So far there are no alternatives to water, viable air, and food from the soil for life survival. The current greed for oil must not imperil these life-sustaining resources, nor make living untenable in the vicinity of oil development and production. As great as the current need for oil may be, its development and production must be rigidly controlled.

The following points are submitted as evidence of the inadequacy of the subject EIR.

1. CUMULATIVE EFFECT. The cumulative effect of subject project with now pending and possible future projects¹ was

1. Draft EIR for Phoenix West Oil and Gas Corp., CUP 3543, p.6

ignored. Oral statements by members of the ERRC were to the effect that the EIR should not consider possible cumulative impacts of this and future projects. We contend that this opinion is wrong and not within the intent of law or sensible planning. One junk yard breeds another. The potential cumulative effect would cut across all environmental aspects of the report.

2. AIR QUALITY ASSESSMENT. At this time we have no basis to question the air quality assessment except for the total omission of any reference to the cumulative effect. Subject project "would have a slight impact on the County's oxidant problem." (2) The emissions of a single car, even an old one, would also have only a "slight impact." Yet this cannot be ignored because of the accumulation.

3. GRADING ASSESSMENT. At the Nov. 12, 1975, meeting of the ERRC we questioned the adequacy of the "grading" plan included in the EIR. We contended that there was no grading plan. There was a sketch of a "Proposed Drill Site Plan." The report itself included the statement, "The Public Works Agency indicates that additional information, such as a grading plan, would be necessary to evaluate the effectiveness of the proposed mitigating measures" (3) In appraising the adequacy of the subject EIR the members of the ERRC were relying on vague "intentions", "indications", and "proposals" of the applicant. Specific, binding plans are essential for any adequate evaluation.

The "Proposed Drill Site Plan" seemingly would place the site on a hill with a grade of approximately 27% (1' in 3.65'), requiring an excavation of nearly 8,000 yards. Apparently the sump would be located immediately below and parallel with the high point of the excavation. What is to prevent natural run off water from running into and overflowing the sump and causing the waste in the sump from contaminating the lower surrounding area? Even in this semi-arid area it sometimes rains fiercely. We foresee additional run-off and erosion problems that, without a grading plan, cannot be evaluated.

We are not presenting a grading plan or assessment thereof. We are contending that, even by the admission of the Public Works Agency, there was insufficient information and requirements to evaluate adequately the environmental impact, and that, therefore, the report was inadequate and incomplete.

2. Ibid, p. 7.

3. Ibid, p. 7.

4. GEOLOGY ASSESSMENT. At this time we have no basis for comment on the geology assessment because our study is as yet incomplete.

5. HYDROLOGY ASSESSMENT. It is essential that underground and surface water be protected. In this section, the report suggests possible underground and/or surface water contamination, and yet lists only as a recommended mitigating measure that "the sump should be lined with impervious material to prevent ground water degradation." (4) Bear Creek is approximately 250 feet from the proposed site. Bear Creek flows into Sisar Creek which becomes Santa Paula Creek. As suggested in numbered Paragraph 3 above, what about possible contamination from overflow of the sump, and surface water contamination from other run-off from the site? We contend that this problem has been cursorily handled by the report.

6. TRAFFIC ASSESSMENT. Large trucks servicing existing oil developments in the broad general area already pose a severe traffic hazard on State Route 150. One needs but to drive this road regularly to attest to this. We have personal knowledge of near misses if not recorded accidents.

Large trucks servicing existing oil developments north on Koenigstein Road from the proposed project present an extreme hazard at the intersection of State Route 150 and Koenigstein Road. This turn cannot be negotiated by large trucks without pulling far into the opposite lane into oncoming traffic and then backing and maneuvering. Attesting to this is the bent guard rail at the south east corner of the bridge which was hit by one of the trucks while negotiating the turn. An increase in the number of large trucks simply multiplies the hazard both at this intersection and on State Route 150. The report acknowledges "the movement of large vehicles at the intersection of State Route 150 and Koenigstein Road could create unsafe conditions," (5) and states that "flagmen should be required for movement of large vehicles at the intersection." (6) Again, the report ignores the hazards from existing oil developments and the cumulative impact from the proposed and possible future projects.

As stated in the report, Koenigstein Road for about one-half mile north of State Route 150 is one-lane, 14 foot width or less, with minimum, and after rains non-existent, shoulders. This section is inadequate for existing traffic, particularly with the recent increase of oil truck use. Further increase in use resulting from the proposed project and possible future projects will make this section untenable. The report, on page 11, refers

4. Ibid, p. 10

5. Ibid, p. 11

6. Ibid, p. 11

to this point as creating an inconvenience but not an unsafe condition. We contend that the added traffic on this section would create an increasing inconvenience, a potentially hazardous situation, and undoubtedly would require greater maintenance and improvement of the winter condition of the road.

On pages 2 and 11 the report refers to a pipeline to transport the oil and suggests that this would alleviate any traffic hazard. Yet there was no indication of where the pipeline might go, what route it might take, whether it was feasible, or what protective measures should be required to prevent water or surface contamination in event of breakage. At the Nov. 12, 1975, ERRC hearing, the applicant stated that they could not submit a plan for the pipeline because easements over various properties would be required and that no effort had been made to acquire these easements. Upon questioning by the audience, the applicant implied that the pipeline would feed into an existing line down State Route 150 owned by another company. There is at least a rumor that the "other company" would not grant permission for use of its line by applicant. When confronted with this, the applicant lamely stated that this was not known to be true. It appears that a truck loading area would be required at or near the intersection of Koenigstein Road and State Route 150 (or somewhere on State Route 150) unless the applicant could use the existing line on State Route 150, or unless the applicant's pipeline extended to Santa Paula or beyond. We contend (1) that it is unlikely that a pipeline ever would exist and thus alleviate hazards from increased traffic, and (2) that the report was inadequate in not requiring some specifics on the pipeline to provide a basis for evaluation.

7. PLANTLIFE AND WILDLIFE ASSESSMENT. The report acknowledges an adverse project impact on plantlife and wildlife. It ignores, however, the potential cumulative effect of this and other possible projects.

8. NOISE ASSESSMENT. One beauty of most of the subject area is its silence except for natural sounds, birds, frogs, crickets, the creeks, etc... The report shows the present noise level as considerably below that of "quiet suburban residential areas," except for the noise associated with traffic on State Route 150 or existing oil development. The proposed project and other probable projects undoubtedly will increase noise to a disturbing level. (It is reported that, in order to reduce the noise level, some drivers already are putting their trucks into neutral coming down the Koenigstein Road grade at the approach of State Route 150, relying only upon their brakes. Heaven help the driver and any driver approaching that intersection on State Route 150 if at sometime those brakes are inoperable.) The report acknowledges the noise level one-half to three-fourths mile away could be raised to a suburban residential or urban level. It apparently glosses over this, however, as an expected price to pay by those in the area for the scarcity of oil. The report

further claims that those residences located slightly over one-fourth mile from the project site "would be unaffected by the project noise" because of a hill located between the project and those residences. We contend that this opinion is erroneous and will continue to contest it.

9. ARCHAEOLOGICAL ASSESSMENT. On page 13 the report states that "the site is in close proximity to the Upper Ojai area which contains numerous recorded archaeological sites." Although there may be no recorded archaeological sites in the immediate area of the proposed exploratory well drilling" the report states on page 13 that "the Archaeological Society recommends that a qualified archaeologist be engaged to make a surface determination of all the area that will be involved..." Beyond the above statements the EIR is silent. There is no indication that the recommended study has been done, or that it should or should not be done. The EIR is incomplete, and, therefore, is inadequate.

10. FIRE PROTECTION. On page 14 the report states that the proposed project site "is located in an extreme fire hazard area." Except for underlining "extreme" it could not be stated better. According to the report, the Ventura County Fire Department indicated that adherence to the United States Forest Service Uniform Fire Code requirements and that "the presence on the site of 20,000 gallons of water for use in the event of fire" would provide adequate protection for the project area. This might be true, though doubtful, for the project site. We admit that, at the present time, we are not familiar with the United States Forest Service Uniform Fire Code requirements, but we contend that with such a volatile operation and in such an extreme fire hazard area, the Ventura County Fire Department, and, therefore, the EIR, should have made a more exhaustive analysis of the problem and recommended more extensive mitigating measures. In the event of loss (if we survive) from fire attributable to the project site, we intend to hold the applicant and Ventura County liable, the applicant for not providing adequate safeguards and Ventura County for not requiring the applicant to do so.

11. VISUAL ASSESSMENT. The Upper Ojai, a mountainous valley, is a beautiful area. Marring it are existing oil developments. The report recognizes, pg. 16, that the operation would be readily visible to travelers on State Route 150. State Route 150 is a tourist-oriented scenic highway. The addition of more sixteen foot high tanks and other oil production equipment at the 1700 foot elevation further rapes the view for all using State Route 150 or Koenigstein Road as well as for residents south of the proposed project. The EIR, on page 16, states that the "applicant proposes to landscape the oil well site if the well is productive." What will be planted for camouflage? The report lists no requirements. We contend that the EIR is inadequate in analysis of the visual impact and in the lack of recommended mitigating measures.

12. BENEFICIAL IMPACTS. In the report only two beneficial impacts were noted. First was the critical need for oil. At the beginning we recognized this need, but tempered it with need for controls. Second was the contribution to the county's tax base "while demanding few governmental services." We question the contribution to the tax base versus the demand for services even if the proposed well is productive. One question is, how productive. Those compiling the EIR make no viable assessment of this. We contend the project will require considerable governmental expense, State and County--road repair, possible road modification, supervision and policing of the operation, fire department service, etc... We further contend that the project may result in some loss in the tax base, partially offsetting the gain, by lowering the potential for residential and agricultural development.

13. SUMMARY. On the basis of the foregoing points, individually as well as collectively, we contend that the EIR should be determined inadequate and that a more objective, in-depth study be made in order to assure the protection of all natural resources and the rights of people now living in the area, those people who delight in visits to the area, and posterity.

Respectfully submitted,

S/H Stewart
S. H. Stewart

Janice B. Stewart

cc. Ventura County Planning Commission
Ventura County Board of Supervisors

ENVIRONMENTAL RESOURCE AGENCY

county of ventura

M. L. Koester, Director

Victor R. Husbands, Director
Planning

November 28, 1975

Mr. and Mrs. S. H. Stewart
12617 Koenigstein Road
Santa Paula, California 93060

Dear Mr. & Mrs. Stewart:

Thank you for your letter of November 20, 1975, regarding the EIR on CUP No. 3543. Your letter and this response will be forwarded to EQAC for its hearing on December 5, 1975.

1. The EIR notes, on page 6, those related projects which have recently been approved and/or are pending County approval. Both projects are over 3 miles from the project area and generally would not have a cumulative impact on the Upper Ojai Valley. Although new oil drilling may be pending in the area, many existing permits allow unlimited drilling in their permit area without additional County approval. There is no feasible basis for estimating future drilling activity which is unrelated to the County permit process. In addition, the projection of possible projects would be based on speculation. The State EIR Guidelines state (Sec. 15142), "Specific reference to related projects, both public and private, both existent and planned, in the region should also be included, for purposes of examining the possible cumulative impact of such projects." The Guidelines do not require a cumulative analysis of possible projects.
2. The EIR (page 7) indicates the air emissions from the project. According to the Air Pollution Control District, emissions associated with the Silver tread and Sisar Creek production fields (pipeline valves and flanges, vessel relief valves, pump seals, compressor seals, and mscl) are 20.56 tons per year. Data is not available to compute existing NO_x emissions associated with these two fields. The project would increase reactive hydrocarbon emissions associated with these fields by 14.2% during the drilling phase (30 to 90 days). Emissions associated with production cannot be determined until well productivity is known. There are no additional County permits pending in the immediate project area for oil drilling activity.

625 East Santa Clara Street, Ventura, CA 93001 (805) 648-6131

3. The Public Works Agency indicates, "the present Grading Ordinance provides for control of grading done in association with oil field work where such grading may pose a hazard to any adjacent property. This control has been adequate in the past in providing protection to adjacent properties, public and private.

Development of the site with features, in general, as proposed in sketches provided in the EIR is considered feasible from the standpoint of grading. That portion of the grading which might adversely affect adjacent properties would be subject to Grading Permit requirements, with conditions and provisions imposed as necessary to protect adjacent properties. Such requirements would include consideration of cut and fill slope stability and erosion prevention measures. Requirement of detailed grading plans is determined prior to approval and granting of the Conditional Use Permit.

In regard to rainfall runoff and possible overflowing of the sump, adequate measures to prevent transport of sediment or waste liquids out of the area are feasible. These measures such as adequate protection of graded surfaces by landscaping, diversion of runoff away from sumps and berming and lining of sumps have been proven by experience to provide adequate protection.

It is important to note that although detailed grading and development plans were not included as a part of the EIR, the report does point out feasible measures to mitigate anticipated potential problems in regard to grading."

4. No response required.
5. According to the Public Works Agency, adverse effects on surface and ground-water quality could occur if the lined sump were to overflow. We would certainly approve of inclusion of preventive measures such as maintenance of adequate freeboard in the sump and elevation of the sump to prevent entrance of surface runoff, but maintain that these minor problems can be easily dealt with and therefore should be included only as a condition of project approval at the time it is reviewed by the Public Works Agency.

6. The Public Works Agency indicates, "the road width and the turning problems for oil field related equipment are adequately discussed in the EIR. Mitigating measures relative to through traffic and turning traffic at the intersection is discussed both in the assessment and the staff evaluation. Similarly, the agencies involved are listed and the responsibility is correctly affixed to the applicant.

To satisfy the complainant would require arbitrary and unreasonable measures of the applicant. For example, the turning movement at the intersection would require complete reconstruction of: Highway 150, the channel in Santa Paula Creek, the bridge, and Koenigstein Road. The widening of the latter would not only destroy the rural atmosphere so prized in this area, but in itself would encourage development in the area, a domino effect of mitigating measures. The almost unmeasurable traffic volumes plus the nearly nonexistent and unrelated accident picture are not sufficient requirements for increased physical construction. The very small and certainly temporary increase in truck volumes are not indicative of the need for massive amounts of construction or concern.

Should an adverse event, such as a traffic accident, occur on Koenigstein Road or at the intersection, would be almost impossible to attribute it to the new use. Accident patterns should not increase and are not related to pure oil field use; a transit mixer delivering concrete for a residential addition or a swimming pool has the same potential for an accident as do the oil field trucks present and proposed."

The placement of pipelines does not require a permit, and consequently, this activity is not subject to environmental review under CEQA. However, the proposed conditions for CUP No. 3543 would require approval of pipeline construction plans by both the Public Works Agency and Planning Director.

7. As noted previously, a cumulative analysis based on possible projects is not feasible nor required by the State EIR Guidelines.
8. The EIR notes on page 13 that the project would change the acoustic environment from one that is more quiet than a typical "quiet suburban residential" community to one that is typical of a "urban or normal suburban residential" community. The Environmental Health

Division indicates that its statements regarding the hill are based on experience in acoustically similar situations as well as literature. The noise may be audible at the homes to the north, but the Division does not expect it to raise the noise level.

9. The Archaeological Assessment (page 13) should be clarified with the following additions:

"Impact: The project could result in the disturbance to or destruction of archaeological resources if they are present on the site.

Mitigating Measures: The Ventura County Archaeological Society recommends that if during construction subsurface archaeological sites are encountered, all work should stop in the immediate area and a qualified local archaeologist consulted to evaluate the site and make recommendations."

The site survey recommended by the Archaeological Society has not been undertaken.

10. (Fire Department will respond by the EQAC meeting.)
11. The project would be visible from Koenigstein Road and would add another well site with structures to those already in existence. The attached map indicates the extent and location of surrounding well sites and illustrates that the area has extensive oil activity, although it is not readily visible. The EIR notes (page 16) that landscaping of the drillsite would be undertaken if the well is productive and could mitigate some of the visual effects. Specific landscape plans are not available at this time; however, landscaping subject to the Planning Director's approval is a condition of the proposed CUP No. 3543. In the event the well is productive, a landscape plan would be developed by a landscape architect.
12. The project, if productive, would generate local tax revenue. According to the applicant, the extent of such revenue at current tax levels is approximately 50¢ on each barrel of oil produced but cannot be estimated as a total figure prior to having an indication of well productivity. A need for project related services indicated in your letter has not been established either by the EIR or your letter and appears to be based on speculation.

13. No response required.

Thank you for reviewing the project.

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY


Victor R. Husbands
Planning Director

November 19, 1975

Environmental Resource Agency
County of Ventura

Gentlemen:

The Draft Environmental Impact Report for Phoenix West Oil and Gas Corporation No. C-U-P 3543 has been received by the undersigned on November 8, 1975. It is noted that the report is scheduled to be heard on November 12, 1975 by your Agency and that comments before the Review Committee are invited at that time, with a three week period for written comments before the final report is accepted.

Based on the Draft report the following demands are made by the undersigned for additional studies, and the following inadequacies in the report are noted:

1. AIR QUALITY ASSESSMENT

Cumulative effect of present oil drilling plus proposed drilling not covered.

2. GRADING ASSESSMENT

Cumulative effect of proposed grading not considered with other present and proposed drilling.

3. GEOLOGY AND HYDROLOGY ASSESSMENT

Report indicates loss of water or pollution of water resources could occur. No mention made of financial protection through insurance or bonds to affected property owners should loss occur. Past history of wildcat drilling in area indicates that owners and operators were not financially responsible for their legal liability.

4. TRAFFIC ASSESSMENT

Unsafe conditions caused by turning movement of trucks which necessitates the complete blocking of traffic on Highway #150 not adequately discussed. The lack of any measures to alleviate this condition is evident plus the apparent lack of any feasible changes to the bridge and roadway because of the topography of the intersection is not discussed. The structure of Koenigstein Road

which narrows to one lane immediately above the bridge at a sharp crest also creates a highly hazardous condition, requiring stopping and backing by passenger vehicles when trucks are encountered, is not adequately discussed nor is the unsafe condition adequately discussed on the one lane portion of Koenigstein Road presently used by the private passenger automobiles of residents in the area and heavy oil and equipment trucks which necessitates the use of rutted shoulders in passing on a steep grade. The conclusion that this condition is only inconvenient and not hazardous is incorrect and not based on the available evidence or any studies conducted but only conjecture.

5. PLANTLIFE AND WILDLIFE ASSESSMENT

Cumulative effect not considered when all of present and proposed drilling is considered. Since the proposed well site would remove the area from potential agriculture, the ecological implications of this were not considered.

6. NOISE ASSESSMENT

Cumulative effect not considered when added to present and proposed oil drilling. Noise from increased traffic including the high noise-producing impact of heavy trucks in a steep and echo-producing canyon area was not considered.

7. ARCHEOLOGICAL ASSESSMENT

The recommendation of the Archeological Society is not discussed as to methods of implementation or measures to protect the site during grading should any archeological remains be found.

8. FIRE PROTECTION ASSESSMENT

In spite of the fact that the report on page 6 describes the area as an extreme fire hazard area, this assessment was given a totally inadequate and incomplete investigation and treatment. The consequences of this area being the source of fire were not discussed. No details were included on protective measures, including the cutting and maintenance of fire breaks surrounding the area. The increase in the fire producing potential of the project and any possible mitigating measures was not discussed. Implications of a major fire in the area not discussed. No mention of insurance for legal liability.

9. VISUAL ASSESSMENT

Cumulative effect when combined with all other present and proposed drilling not discussed. Effect on the entire area not adequately discussed with the implication of the gradual change of the east end of Upper Ojai from a scenic agricultural and recreational area, to an oil production area. Mitigating measures not detailed to include type and extent of proposed landscaping. Visual effect on residents north of site driving to and from homes not considered.

10. OTHER ENVIRONMENTAL CONSIDERATION

Proposed oil pipeline given no adequate exposition. No details from applicant given as to where and when pipeline to be installed. No environmental impact study made on the proposed pipeline.

11. BENEFICIAL IMPACT

No information given as to need. Applicants' conclusion may be based on political consideration. Alternatives to any shortage other than further production sites not discussed. Total oil reserve in U.S. and implications of depleting reserve not mentioned. Revenue question not exposed. Possible future reduction of tax base by removing area from home site and agricultural consideration not discussed.

12. ADVERSE ENVIRONMENTAL EFFECT

Not adequately covered. Omitted all factors other than air, wildlife, and visual.

13. MITIGATING FACTORS - Discussed above.

14. ALTERNATIVES

Traffic, air and noise are indicated as a temporary condition. It is submitted these would be permanent if the site is productive. No alternatives to drilling for oil at same source by diagonal drilling or whipstocking from existing oil field adjacent to proposed site discussed.

15. SHORT TERM VS LONG TERM IMPLICATIONS, IRREVERSIBLE ENVIRONMENTAL CHANGES, GROWTH INDUCING IMPACTS

Not adequately covered. Given only perfunctory and limited treatment and investigation.

16. CUMULATIVE IMPACT

Not adequately covered as cited above, and in the broader sense required.

Respectfully
John R. Whitman

ENVIRONMENTAL RESOURCE AGENCY

county of ventura

M. L. Koester, Director

Victor R. Husbands, Director
Planning

November 27, 1975

Mr. John R. Whitman
12615 Koenigstein Road
Santa Paula, California 93060

Dear Mr. Whitman:

Thank you for your letter of November 19, 1975, regarding the EIR on CUP No. 3543. Your letter and this response will be forwarded to EQAC for its hearing on December 5, 1975.

1. Air Quality Assessment

The EIR (pg. 7) indicates the air emissions from the project. According to the Air Pollution Control District, existing reactive hydrocarbon emissions associated with the Silver thread and Sisar Creek production fields (pipelines valves and flanges, vessel relief valves, pump seals, compressor seals, and mscl) are 20.56 tons per year. Data is not available to compute existing NOx emissions associated with these two fields. The project would increase reactive hydrocarbon emissions associated with these fields by 14.2% during the drilling phase (30 to 90 days). Emissions associated with production cannot be determined until well productivity is known. There are no additional County permits pending in the project area for oil drilling activity. Although new oil drilling may be pending in the area, many existing permits allow unlimited drilling in their permit area without additional County approval. There is no feasible basis for estimating new drilling activity which is unrelated to the County permit process.

2. Grading Assessment

The EIR (pg. 7) indicates the grading assessment associated with the project. Other drilling activity in the area is occurring under old permits which are not subject to County review. Observation indicates that 2 wells are being drilled in the immediate project area - 1 between Summit School Road and Koenigstein Road, and 1 approximately 1/2 miles southeast of the proposed project.

625 East Santa Clara Street, Ventura, CA 93001 (805) 648-6131

The Public Works Agency indicates, "the cumulative impact of existing oil well sites in the region of the subject project is considered negligible in so far as hillside stability and transport of earth materials by erosion is concerned. Additional well sites which might be proposed throughout the region should not result in significant impact in regard to the aforementioned factors, if grading is not carried out in an indiscriminate manner.

The present Grading Ordinance provides for control of grading done in association with oil field work where such grading may pose a hazard to any adjacent property. This control has been adequate in the past in providing protection to adjacent properties, public and private.

Development of the site with features, in general, as proposed in sketches provided in the EIR is considered feasible from the standpoint of grading. That portion of the grading which might adversely affect adjacent properties would be subject to Grading Permit requirements, with conditions and provisions imposed as necessary to protect adjacent properties. Such requirements would include consideration of cut and fill slope stability and erosion prevention measures. Requirement of detailed grading plans is determined prior to approval and granting of the Conditional Use Permit.

In regard to rainfall runoff and possible overflowing of the sump, adequate measures to prevent transport of sediment or waste liquids out of the area are feasible. These measures such as adequate protection of graded surfaces by landscaping, diversion of runoff away from sumps and berming and lining of sumps have been proven by experience to provide adequate protection.

It is important to note that although detailed grading and development plans were not included as a part of the EIR, the report does point out feasible measures to mitigate anticipated potential problems in regard to grading."

The excavation would create a cumulative visual impact as noted on page 16. As noted under item No. 1 of this letter, proposed drilling activity in the area is unknown, prohibiting a cumulative analysis which extends beyond activities on new County permits.

3. Geology and Hydrology

The section on Geology and Hydrology discusses measures to mitigate environmental impacts. The State EIR Guidelines do not require a discussion of financial responsibilities.

4. Traffic Assessment

The Public Works Agency indicates, "the road width and the turning problems for oil field related equipment are adequately discussed in the EIR. Mitigating measures relative to through traffic and turning traffic at the intersection is discussed both in the assessment and the staff evaluation. Similarly, the agencies involved are listed and the responsibility is correctly affixed to the applicant.

To satisfy the complainant would require arbitrary and unreasonable measures of the applicant. For example, the turning movement at the intersection would require complete reconstruction of: Highway 150, the channel in Santa Paula Creek, the bridge, and Koenigstein Road. The widening of the latter would not only destroy the rural atmosphere so prized in this area, but in itself would encourage development in the area, a domino effect of mitigating measures. The almost unmeasurable traffic volumes plus the nearly nonexistent and unrelated accident picture are not sufficient requirements for increased physical construction. The very small and certainly temporary increase in truck volumes are not indicative of the need for massive amounts of construction or concern.

Should an adverse event, such as a traffic accident, occur on Koenigstein Road or at the intersection, it would be almost impossible to attribute it to the new use. Accident patterns should not increase and are not related to pure oil field use; a transit mixer delivering concrete for a residential addition or a swimming pool has the same potential for an accident as do the oil field trucks present."

5. Plantlife and Wildlife Assessment

According to the Public Works Agency, the EIR is sufficient relative to Flora and Fauna for the project, a single exploratory well. A revision would be necessary only if additional wells are to be drilled. There are no additional County permits in the project area for oil drilling activity.

The State EIR Guidelines require a discussion of alternatives which could feasibly obtain the objectives of the project, alternative locations and a "no project" alternative. The alternative location and "no project" alternative are discussed on Page 19. There appears to be no other feasible alternative (see response on page 14). The discussion of alternatives such as agricultural use and related impacts is not required.

6. Noise Assessment

Noise measurements of existing noise levels in the area were recorded and are found on page 14 of the EIR. Noise associated with the project was estimated and compared with existing levels (page 13). As noted previously, a cumulative analysis which extends beyond activities on new County permits is not readily feasible. The projects which are pending County approval are over 3 miles from the proposed project and would not have a cumulative impact related to noise.

The noise from trucks was considered to have only a very slight impact when compared to the noise from the drill rig itself. The trucks will generate a transient noise as opposed to the more constant noise caused by the rig. Trucks will generate noise of about 90 dB(A) at a distance of 50 feet. This noise will be audible at a considerable distance. The exact degree of impact cannot be quantified because we do not know the extent of other truck traffic in the area.

7. Archaeological Assessment

This section indicates mitigating measures associated with possible archaeological sites. The implementation of these measures could be achieved by the adoption of related conditions by the Planning Commission and/or Board of Supervisors.

8. Fire Protection Assessment

(The Fire Department will respond by the EQAC hearing on December 5, 1975.)

9. Visual Assessment

The project would be visible from Koenigstein Road and would add another well site with structures to those already in existence. The attached map indicates the extent and location of surrounding these well sites and

illustrates the area has extensive oil activity, although it is not readily visible. The EIR notes (page 16) that landscaping of the drillsite would be undertaken if the well is productive. Specific landscape plans are not available at this time; however, landscaping subject to the Planning Director's approval is a condition of the proposed CUP No. 3543. In the event the well is productive, a landscape plan would be developed by a landscape architect.

10. The placement of pipelines does not require a permit, and consequently, this activity is not subject to environmental review under CEQA. However, the proposed conditions for CUP No. 3543 would require approval of pipeline construction plans by both the Public Works Agency and Planning Director.
11. The inclusion of beneficial impacts in an EIR is not required by the State EIR Guidelines, and the questions raised regarding the beneficial impacts of the project exceed the scope of impacts associated with drilling one well.
12. The State EIR Guidelines require the discussion of "any adverse environmental effects which cannot be avoided if the proposal is implemented." The summary on page 17 should include the temporary increase in noise level resulting from drilling, the transient noise associated with temporary truck traffic, an increase in traffic and the possible destruction of an archaeological site. All of these factors are discussed in some detail in other portions of the document.
13. No response required.
14. The applicant indicates that diagonal drilling or whip stocking from the existing oil field adjacent to the proposed site is not a feasible alternative. According to the applicant, the locating of a test well is dictated by the anticipated subsurface structure, not by convenience to the surface access. The present location has been selected based on our best geological interpretation of the subsurface structure.

As to reaching this location by directional drilling, the horizontal distance which can be reached by a directionally drilled well is limited, among other things, by the anticipated depth of the zone to be tested. In the case of the proposed well, this distance would not be in excess of 1,000 feet and would more probably be in the 750 foot range, which distance is insufficient to remove the well from the immediate area of the proposed location. Further, the well location by the terms of the oil lease must be on the surface of the land under lease to Phoenix West by the Lessor

November 28, 1975
EIR - CUP No. 3543
Page 6

which is the W $\frac{1}{2}$ SE $\frac{1}{4}$ and E $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 7, T4N, R21W,
S.B.B.&M.


15. The comment is too general and cannot be responded to
without more specific questions or statements.

16. Responded to in earlier sections.

Thank you for reviewing the project.

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY


Victor R. Husbands
Planning Director
for

VRH:JL:dr/311-711

COUNTY OF VENTURA
FIRE SERVICES AGENCY

MEMORANDUM

Janet Lyders
TO: Planning Division
 Captain Carl Hill *CH*
FROM: Bureau of Fire Prevention

DATE: Dec. 3, 1975

REF. NO: _____

SUBJECT: Reply to public comments on CUP 3543

In reply to Mr. Whitman's letter, Item #8 "Fire Protection Assessment":

The fire protection aspects of the project were discussed on page #16 of the EIR, where the applicant stated he would adhere to the Uniform Fire Code requirements, plus installing a 20,000 gallon water tank for fire protection use.

The Uniform Fire Code, Article 15, Division X, covers oil well drilling operations. It requires a Uniform Fire Code Permit for the process, and sets various fire prevention and fire protection requirements, including fire breaks, fire extinguishing equipment, no smoking, blowout prevention controls, etc.

Prior to issuance of a permit an on-site inspection is made by a Fire Prevention Officer to insure all requirements are met.

We feel that these procedures do provide for a reasonable degree of fire safety for such projects.

CH:bb

cc: File

PAOF NO. 89A

ROBERT L. RICHARDSON
PETROLEUM ENGINEER
536 EAST THOMPSON BLVD. VENTURA, CALIFORNIA 93001
TELEPHONE (805) 648-4996

December 1, 1975

Environmental Quality Appeals Committee
Ventura County
625 East Santa Clara Street
Ventura, California 93001

SUBJECT: CUP 3543 (Phoenix West Oil and Gas Corp.)

Gentlemen:

I have reviewed the two recent letters submitted by Mr. Whitman and Mr. Stewart in reference to the EIR for CUP 3543 on the Phoenix West Oil and Gas Corp. proposed oil and gas exploratory well in the Sisar Area of the Ojai Oil Field. In general, both letters find fault with the EIR on the basis of gross exaggeration and rank speculation.

These people have purchased property which, with or without their previous knowledge, is adjacent to the oldest oil producing area in Southern California, dating back over 100 years to 1867. Further, by their own observation, their homes are in a fire trap which condition existed at the time of purchase and will continue to exist with or without continued oil activity. I have no quarrel with their desire to protect their property, but I do question their presumption that they can demand the halting of the long established land use of the area so as to correct their misjudgment and failure to become informed before investing in the area.

As a result of their election to live in the area, Phoenix West has had placed on its operations, and has accepted, numerous special conditions, both restrictive and costly to them, and not normally required of oil and gas operations in an established oil area. Phoenix West indicated their willingness to accept the presences of the homeowners and not to unduly disturb them by agreeing to these mitigating measures. Phoenix West has not flatly rejected the presences of the homeowners in the oil field environment. It is quite apparent that the Whitmans and Stewarts are not willing to accept the continued development of oil and gas in a long standing oil and gas productive area; but rather, to their own ends and at the expense of others, are attempting to use the EIR process to correct their own errors in judgment.


In answer to the general tone of the letters, that the presences of an oil well drilling or producing operation will mar the area and reduce land values, I can only say that they are totally misinformed. Oil and gas exploration and production have been demonstrated as being compatible with residential

Environmental Quality Appeals Committee
Page Two
December 1, 1975

areas throughout the Los Angeles area as well as in Ventura County adjacent to much more heavily built and populated areas than is the situation in question. As to unpopulated area, whether open space or agricultural, oil field development is commonplace and not only compatible but generally encouraged. An oil and gas discovery substantially increases land values, thereby removing an economic need to change the land use from open space or agricultural to more service demanding and less revenue producing residential use.

It is not the purpose of the EIR process that the County of Ventura be used as a tool by these people in order to correct their errors in judgment, particularly not at the expense of others. Despite the inferences of the letters, the oil and gas industry is not a second class citizen, particularly not in Ventura County where the mineral tax bill to the industry in the 1975-76 tax year will be \$9 million and where industry activity and services provide a substantial portion of the county's employment opportunities. The approval of the pending EIR and associated CUP and the rapid movement of this project to commencement is urgently requested.

Yours truly,


Robert L. Richardson
Petroleum Engineer

RLR:ba
cc: Mr. Frank R. Jewett
Mr. Ralph R. Bennett

Phoenix

OIL AND GAS CORPORATION • 536 East Thompson Boulevard Suite 5, Ventura, California 93001 • (805) 648-3881

O.J. HANSON
President

December 1, 1975

Environmental Quality Appeals Committee
Ventura County
625 East Santa Clara Street
Ventura, California 93001

SUBJECT: CUP 3543 (Phoenix West Oil and Gas Corp.)

Gentlemen:

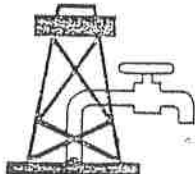
The purpose of this letter is to reply in part to the content and charges of Mr. Seawright Stewart's letter addressed to the Environmental Quality Appeals Committee on November 20, 1975, with additional copies sent to the Board of Supervisors and the Planning Commission.

Mr. Stewart severely questions the adequacy of the recent draft of an Environmental Impact Report which was submitted to the Environmental Report Review Committee and unanimously approved by Committee members.

In his letter Mr. Stewart charges the report with glaring inadequacies in virtually every section. Not being trained and hence not competent to judge the contents of this report, I must content myself with the observation that Mr. Stewart's criticism appear to stem from the fact that the report does not support his point of view; that it does not oppose the drilling of Phoenix West's test well in Section 7, T4N, R21W. It seems worthwhile to observe that the report does not support the drilling of the well either. The EIR is an objective document which sets forth an abundance of facts along with some reasonable opinions and recommended mitigating measures. Having been written following extensive research and preparation on the part of the Planning Department staff and at not inconsiderable expense to Phoenix West, it deserved the acceptance it received from a Committee trained and experienced to judge its contents.

Being adequate to its purpose, having been extensively researched, and having been presented in a way that invites impartial acceptance, I wish to urge that the appeal to judge this report inadequate be denied by your committee.

I would submit only two reasons for such denial. The first pertains to the adequacy of the EIR. It is widely acknowledged that one mark of an educated person - and Mr. Stewart's career has been in the field of education, so I would look for his agreement here - is to look for only as much precision as



Environmental Quality Appeals Committee
Page Two
December 1, 1975

the nature of the subject matter admits. The subject matter of an EIR, covering many subjects, invites infinite research; but in fields that do not admit the kind and degree of precision which, judging from Mr. Stewart's letter, the residents of Bear Canyon would find acceptable. The precision proper to this report is very well expressed in those areas where such precision is possible, as witness the section on the effects of noise from a drilling venture conducted on the designated location. The possible effects are calculated in decibels - mathematical precision.

The second reason for denying this appeal looks beyond the EIR to the general interest of County of Ventura residents, being a sum of the particular interests and including the employees of Phoenix West as well as the petitioners themselves.

In Mr. Stewart's letter it is contended that by approving Phoenix West's application the County may suffer some actual loss in its tax base. He claims this loss would result from the smaller tax gains from oil production being offset by potentially greater gains from either an agricultural or residential development of the land.

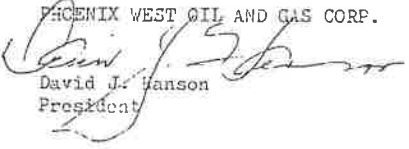
Even were it held true that two birds in the bush are worth more than one in hand, this contention cannot be supported by facts.

Agricultural use, employing the agricultural reserve provisions, would base the full value on crop yield, or probably \$1,000 to \$1,500 per acre. Residential use, depending on the type, would result in a full value potential of up to \$120,000 per acre. (Any residential values must be tempered by the outlay of tax money to provide the substantial County service demands of water, sewer, lights, schools, fire, police, etc., which accompany residential development.) On the other hand, an oil and gas discovery has the potential to provide a mineral rights value of \$200,000 per acre on the total 160 acres while occupying less than 10 acres of the surface of the land. The unoccupied remaining 150 acres are available for whatever surface use is desired, or they could be left in their present undisturbed state conforming to an open space designation.

In view of the realistic tax consequences presented above, further delay of this project by critics of the County's EIR and those opposed to further development of an historic oil and gas producing area is not alone detrimental to Phoenix West and its associates. It is also contrary to the interests of the County of Ventura.

Yours very truly,

PHOENIX WEST OIL AND GAS CORP.


David J. Hanson
President

DJH:ba
cc: Mr. Frank R. Jewett
Mr. Ralph R. Bennett

December 1, 1975

Environmental Quality Appeals Committee
Ventura County
625 E. Santa Clara Street
Ventura, California 93001

Re: CUP 3543

As residents concerned with preserving the Upper Ojai area we are opposed to the approval of Conditional Use Permit 3543. The subject project will mar the naturalness of the area, lower the quality of the environment, infringe upon the rights of the present residents, and may endanger the long range potential. We request that all governmental agencies take whatever action is necessary to protect all natural resources and assure the heritage of this accessible, semi-wilderness area for all citizens of Ventura County.

Respectfully submitted,

Mrs Lee Brooks
12178 Sisar Rd
Santa Paula, CA
93060

ENVIRONMENTAL RESOURCE AGENCY

county of ventura

M. L. Koester, Director

Victor R. Husbands, Director
Planning

January 6, 1976

Mr. and Mrs. L. C. Brooks
12178 Sisar Road
Santa Paula, California 93060

Dear Mr. and Mrs. Brooks:

Thank you for your comments regarding the EIR for CUP No. 3543. Your letters and this response will be forwarded to the Board of Supervisors for its hearing on January 13, 1976, regarding the adequacy of the document.

1. The EIR notes on page 6 those related projects which have recently been approved and/or are pending County approval. Both projects are over 3 miles from the project area and generally would not have a cumulative impact on the Upper Ojai Valley. Although new oil drilling may be pending in the area, many existing permits allow unlimited drilling in their permit area without additional County approval. There is no feasible basis for estimating future drilling activity which is unrelated to the County permit process. In addition, the projection of possible projects would be based on speculation. The State EIR Guidelines state (Sec. 15142), "Specific reference to related projects, both public and private, both existent and planned, in the region should also be included, for purposes of examining the possible cumulative impact of such projects." The Guidelines do not require a cumulative analysis of possible projects.
2. The Public Works Agency indicates, "The present Grading Ordinance provides for control of grading done in association with oil field work where such grading may pose a hazard to any adjacent property. This control has been adequate in the past in providing protection to adjacent properties, public and private.

Development of the site with features, in general, as proposed in sketches provided in the EIR is considered feasible from the standpoint of grading. That portion of the grading which might adversely affect adjacent properties would be subject to Grading Permit requirements, with conditions and provisions imposed as necessary to protect adjacent properties. Such requirements would include consideration of cut and fill slope stability and erosion prevention measures. Requirement of detailed grading plans is determined prior to approval and granting of the Conditional Use Permit.

625 East Santa Clara Street, Ventura, CA 93001 (805) 648-6131

In regard to rainfall runoff and possible overflowing of the sump, adequate measures to prevent transport of sediment or waste liquids out of the area are feasible. These measures such as adequate protection of graded surfaces by landscaping, diversion of runoff away from sumps and berming and lining of sumps have been proven by experience to provide adequate protection.

It is important to note that although detailed grading and development plans were not included as a part of the EIR, the report does point out feasible measures to mitigate anticipated potential problems in regard to grading."

3. The Public Works Agency indicates, "The road width and the turning problems for oil field related equipment are adequately discussed in the EIR. Mitigating measures relative to through traffic and turning traffic at the intersection is discussed both in the assessment and the staff evaluation. Similarly, the agencies involved are listed and the responsibility is correctly affixed to the applicant."
4. The placement of pipelines does not require a permit, and consequently, this activity is not subject to environmental review under CEQA. However, the proposed conditions for CUP No. 3543 would require approval of pipeline construction plans by both the Public Works Agency and Planning Director.
5. Since there are no additional permits for oil activity pending in the immediate project area, a cumulative noise impact analysis was not done. According to the Environmental Health Division, measures which could be undertaken to mitigate excessive noise include (1) muffling of engines, (2) use of rubber mats to prevent pipe clanging and, (3) construction of temporary wooden barriers with acoustically treated surfaces.
6. The EIR included the recommendation of the Ventura County Archaeological Society that if subsurface archaeological sites are encountered during construction, all work should stop in the immediate area and a qualified local archaeologist called in to evaluate and make recommendations.
7. The Ventura County Fire Department indicates the following:
"The fire protection aspects of the project were discussed on page 16 of the EIR, where the applicant stated he would adhere to the Uniform Fire Code Requirements, plus installing a 20,000 gallon water tank for fire protection use.

The Uniform Fire Code, Article 15, Division X, covers oil well drilling operations. It requires a Uniform Fire Code Permit for the process, and sets various fire prevention and fire protection requirements, including fire breaks, fire extinguishing equipment, no smoking, blowout prevention controls, etc.

Prior to issuance of a permit an on-site inspection is made by a Fire Prevention Officer to insure all requirements are met.


We feel that these procedures do provide for a reasonable degree of fire safety for such projects."

8. The EIR on page 16 notes the project site and related oil well equipment would be visible from the south, east and west.

Thank you for reviewing the EIR.

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY


Victor R. Husbands
Planning Director

VRH:JW:dr/873

11/15/75

November 18, 1975

Ventura County Environmental Resource Agency
625 Santa Clara Street
Ventura, California 93001


Dear Sirs:

I strongly oppose the environmental research done for the Phoenix Mutual Oil Company under the number of CUP 3543. I am a resident of the Upper Ojai Valley and the study has failed to bring out important points in the transportation section, e.g. vehicles using Koenigstein Road would have to turn into the oncoming traffic lane to negotiate access to the road. It should also be noted that the oncoming traffic lane is on a curve and vehicles proceeding to Santa Paula or to Ojai are unable to see in time a vehicle making that turn. Further, there has been no mention of the environmental impact of a pipeline from the wells to the highway or the possible impact of seepage to our water source. Presently, Sistar Mutual Water Company produces a high quality water, and I do not wish to have it contaminated.

Furthermore, I believe that somebody should speak for the wildlife that inhabit that area, and if drilling should be increased in our valley it would definitely be detrimental to the existing wildlife.

Please take a ride up Koenigstein Road and tell me if you wish to reside on that road now....

Sincerely,



THOMAS FORGEA

TF:o

cc. Frank Jewitt
Edwin Jones
Ralph Bennett
Theodore Granasen
John Flynn

ENVIRONMENTAL RESOURCE AGENCY
county of ventura

M. L. Koester, Director

Victor R. Husbands, Director
Planning

January 5, 1976

Mr. Thomas Forgea
P. O. Box 3181
Ventura, California 93003

Dear Mr. Forgea:

Thank you for your comments regarding the EIR for CUP No. 3543. Your letter and this response will be forwarded to the Board of Supervisors for its hearing on January 13, 1976, regarding the adequacy of the document.

In response to comments on the traffic assessment section the Public Works Agency has indicated, "the road width and the turning problems for oil field related equipment are adequately discussed in the EIR. Mitigating measures relative to through traffic and turning traffic at the intersection is discussed both in the assessment and the staff evaluation. Similarly, the agencies involved are listed and the responsibility is correctly affixed to the applicant."

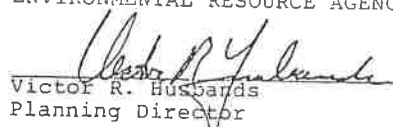
Regarding the proposed pipeline, the placement of pipelines does not require a permit, and consequently, this activity is not subject to environmental review under CEQA. However, the proposed conditions for CUP No. 3543 would require approval of pipeline construction plans by both the Public Works Agency and Planning Director.

The Geology and Hydrology Assessments (p. 7-11) discuss water quality impacts associated with the project and the wildlife assessment (p. 12) notes, "Removal of the vegetation for the proposed drilling site would have a substantial adverse impact on wildlife. This impact would extend beyond the actual drill site due to increased noise levels and the presence of human activity."

Thank you for reviewing the EIR.

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY


Victor R. Husbands
Planning Director

VRH:JW:dv/403

625 East Santa Clara Street, Ventura, CA 93001 (805) 648-6131

12/5/75

To: EQAC, Ventura County


Re: CUP 3543

As a resident of the area, and Co-Chairman of the Committee to preserve the Upper Ojai, I am opposed to the approval of the proposed CUP 3543.

A. The EIR as presented is very inadequate. One example: there has not been any impact statement concerning the potential pipeline referred to on page 2 of the EIR.

B. The proposal has not been adequately viewed in the context of the cumulative effect of all the proposals and operations effecting this area. For example : the ^{visual} impact will be very detrimental to the area, especially as part of a large oil field, marring the natural setting of the area.

Thank, you,


Ralph C. Eastwick
9902 Sulphur M. Rd.
Ojai, Calif. 93023
Co-Chairman CFUC

ENVIRONMENTAL RESOURCE AGENCY

county of ventura

M. L. Koester, Director

Victor R. Husbands, Director
Planning

January 5, 1976

Mr. Ralph C. Bostwick
9902 Sulphur Mt. Road
Ojai, California 93023

Dear Mr. Bostwick:

Thank you for your comments regarding the EIR for CUP No. 3543. Your letter and this response will be forwarded to the Board of Supervisors for its hearing on January 13, 1976, regarding the adequacy of the document.

The placement of pipelines does not require a permit, and consequently, this activity is not subject to environmental review under CEQA. However, the proposed conditions for CUP No. 3543 would require approval of pipeline construction plans by both the Public Works Agency and Planning Director.

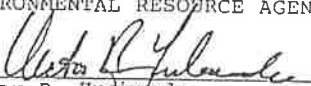
The EIR notes on page 6 those related projects which have recently been approved and/or are pending County approval. Both projects are over 3 miles from the project area and generally would not have a cumulative impact on the Upper Ojai Valley. Although new oil drilling may be pending in the area, many existing permits allow unlimited drilling in their permit area without additional County approval. There is no feasible basis for estimating future drilling activity which is unrelated to the County permit process.

The EIR (p. 16) notes the visual impact of the project as well as other visible oil well sites that have current drilling activity. The attached map indicates the extent and location of surrounding well sites and illustrates the area has extensive oil activity, although it is not readily visible.

Thank you for reviewing the EIR.

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY


Victor R. Husbands
Planning Director

VRH:JW:dv

625 East Santa Clara Street, Ventura, CA 93001 (805) 648-6131



people productions
p.o. box d
10338 ojai-santa paula rd.
ojai, california 93023
805 6462146



Environmental Resource Agency
Planning Commission
625 E. Santa Clara
Ventura, Ca. 93001

11/20/75

Re: Environmental Impact Report
Phoenix West Oil and Gas Corporation
CUP-3543

Dear Planning Commission,

I have finished reading the above Environmental Impact Report and thank you ahead for considering my observations.

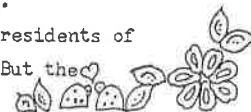
The report is not complete in many areas as questions are raised in my mind concerning:

1) Water Contamination. Page 10 Section 3220 states that the owner will use every possible means to protect the water supply. How thorough can and will the owner be? Can a water supply be perfectly safeguarded? This area is rich in natural springs known for their drinking water.

Sec. 3221 states that if detrimental substances are found in the water supply, a supervisor can call a shut off test, which will be held 10 days from the time the owner receives the notice. What is happening in the interim time? Is the water becoming more contaminated? And who is checking to see that the water is unaffected in the first place?

2) Traffic. Hwy 150 is a lovely, windy, scenic country road, not meant for heavy oil traffic. I am not convinced that the owner would provide proper supervision for the trucks entering and leaving Koenigstein Road, which is a sharp curve and definitely hazard prone. All the residents of Upper Ojai who use Hwy 150 to Santa Paula would be definitely inconvenienced, not to mention the accident possibilities. For the residents on Koenigstein, the constant traffic would be most annoying.

3) Noise. The noise assessment on page 10 states that residents of Rancho Del Oso would not be affected by the project noise. But the



Re: Env. Impact Report for CUP 3543

next paragraph states that if noise complaints are voiced, efforts would be undertaken to lessen the problem. What steps can be realistically taken to dim the noise of large trucks and oil activity? I don't feel the noise can be alleviated and it will certainly be a disturbance to the residents on Koenigstein Road.

Besides the many questions raised, as the pipe line question has not been thoroughly explained, I feel even more important are the facts presented which are strong reasons enough for this project to be denied.

"This area is an excellent wildlife habitat." Page 12. Due to the removal of vegetation for drilling, the noise created, and human activity, it is stated that there would be an adverse impact on the wildlife. The area itself will be changed from that of a picturesque natural terrain with wildlife, and vegetation to an oil activity area with trucks noise, lights, and not any "landscaping" will change this!

I feel here I should mention that a favorable result from this project would open the way for additional drilling of oil wells which would multiply and add to all the problems stated herein.

Another effect that would be detrimental to all people who appreciate and wonder at the beauty of Upper Ojai is the visual impact. The Topa Topa Mountains are spectacular and the thought that the future holds for them oil fields is most disturbing! I truly hope that Ventura County will realize the diminishing beauties in Southern California and try to preserve it's own great sights, and natural areas.

In summation I would like to state that all the risks mentioned in my report, coupled with the strong facts of detrimental effects to the wildlife, geography, and visual aspects, far outweigh the "urgent" need for oil as expressed by the owner.

I believe that this is a time in the history of man for all of us to search our hearts for our values and fully weigh all the consequences of our decisions, in trying to preserve the beauty of the our earth for us and all generations to come.

Thank you

Very Sincerely,

Susan Florence
Susan Florence

Reasons for Inadequacy of the Draft Environmental Impact Report
for Conditional Use Permit 3543

1. The EIR ignored the cumulative effect on many aspects of the environment of this project with existing and possible future projects.
2. Since no detailed grading plan was required or submitted the EIR could not access the possible impact of excavating approximately 8000 yards of dirt.
3. The EIR made an inadequate assessment of traffic safety, inconvenience, and additional road maintenance that would be required on State Route 150, the intersection of State Route 150 and Koenigstein Road, and Koenigstein Road.
4. Since no plan was submitted the EIR made no assessment of the possible impact of a pipeline to transport oil that the applicant stated the intention to install.
5. The EIR ignored the cumulative noise impact and offered no recommended mitigating measures, but stated only that "the applicant indicates that efforts would be undertaken to attenuate the noise if complaints are received during the drilling phase of the project."
6. The EIR didn't make adequate recommendations for the protection of the possible archaeological values of the area.
7. The EIR made an inadequate assessment of the potential fire hazard that could result from the proposed operation and inadequate recommendations for mitigating measures.
8. The EIR did not take sufficient consideration of the visual impact of the 16 foot high tanks and other oil production equipment at the 1700 foot elevation.

SEP 10 1982

RECEIVED
ENVIRONMENTAL
DEPARTMENT

ENVIRONMENTAL RESOURCE AGENCY

County of Ventura

M. L. Koester, Director

Victor R. Husbands, Director
Planning

January 6, 1976

Ms. Susan Florence
P. O. Box D
10338 Ojai - Santa Paula Road
Ojai, California 93023

Dear Ms. Florence:

Thank you for your letter of November 11, 1975, regarding the EIR on CUP No. 3543. Your letter and this response will be forwarded to the Board of Supervisors for its hearing on January 13, 1975.

1. Sections 3220 and 3221 are excerpts from the Public Resource Code which indicates the responsibilities of the California Division of Oil and Gas related to oil drilling. Mr. D. E. Ritzius of the Division has reviewed your comments and submitted the following response:

"As regards Sec. 3220 of the Public Resources Code, one of the responsibilities of the State Division of Oil and Gas is to protect all fresh waters from contamination by reason of the drilling of oil wells. This protection is normally accomplished by placing cement between the hole drilled and the casing. If a well is not an oil producer, and the fresh waters are very deep--say 2,000 feet--and there is no casing cemented that deep, then a cement plug is placed across the fresh-brackish water interface. This prevents the brackish water from ever entering the fresh water-bearing strata.

I know of no instance where an oil well is responsible for allowing brackish water to enter fresh waters. A good example of oil wells drilled where fresh waters are present is the Oxnard Plains where hundreds of oil wells have been drilled through some of the finest fresh water aquifers found anyplace, and on some of the finest agricultural land in the world, with no known damage.

625 East Santa Clara Street, Ventura, CA 93001 (805) 648-6131

Sec. 3221 of the Public Resources Code only reinforces Sec. 3220, and provides a way to check for damage after an oil well is completed and is producing. I know of no instance where this section has been used because of suspected contamination of fresh waters, however the section provides a means should it be needed.

There are fresh water springs on the mountainside above this location but I sincerely doubt that there are any fresh waters at this location; the detrital material on the surface, and perhaps to a depth of 300 or 400 feet, would allow rain water to percolate down through it and on to Sesar creek, and therefore this weathered zone would be protected so that no contaminating substance could enter it."

2. The Public Works Agency indicates, "The road width and the turning problems for oil field related equipment are adequately discussed in the EIR. Mitigating measures relative to through traffic and turning traffic at the intersection is discussed both in the assessment and the staff evaluation. Similarly, the agencies involved are listed and the responsibility is correctly affixed to the applicant."
3. The Environmental Health Division indicates the following steps could be taken to attenuate excessive noise related to oil drilling:
 - a. Muffling of engines;
 - b. Use of rubbermats to prevent pipe clanging and
 - c. Construction of temporary wooden barriers with acoustically treated surfaces.

Your remaining comments relate to reasons for denial of the project and not to the adequacy of the EIR. These comments should be directed to the Planning Commission for its hearing on the Conditional Use Permit. Thank you for reviewing the EIR.

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY


Victor R. Husbands
Planning Director

VRH:JW:dv/849

APPENDIX B
STAFF REPORT TO BOARD OF SUPERVISORS

county of ventura

Verbal Behavior in the Playroom

April 27, 1976 (Agenda)

295

Board of Supervisors
County of Ventura
Courthouse
501 Poli Street
Ventura, California 93001

ERA MEMO:
Legibility of writing, typing or
printing UNSATISFACTORY
in portions of the document
when received.

Subject: Appeal of Conditional Use Permit No. CUP-3543 by the permittee:
Phoenix West Oil and Gas Corporation

Gentlemen:

Statement of Matter for Board Consideration

Phoenix West Oil and Gas Corporation is appealing seven (7) conditions imposed on a Conditional Use Permit granted by the Planning Commission for one exploratory oil and gas well.

STAFF TESTIMONY AND PROPOSED FINDINGS:

1. Location and Parcel No.: The subject drilling site is a 250 foot by 250 foot, 1.5 acre portion of a 144.5 acre parent parcel, located approximately 350 feet north of Koenigstein Road, at a point approximately 1/2 mile northeast of Highway 150 in the Upper Ojai Valley, approximately 7 miles north of the city limits of Santa Paula. The Assessor's Parcel No. is 40-010-52;
2. Chronology of Administrative Processing and Public Hearings
 - June 27, 1975 - The Phoenix West Oil and Gas Corporation filed an application for a CUP to drill an exploratory oil well;
 - July 3, 1975 - Planning Division Staff conducted an initial study on the subject project and recommended a Negative Declaration (ND);
 - July 8, 1975 - The Environmental Assessment Committee (EAC) determined that an ND would be sufficient for the subject project;
 - July 23, 1975 - The Environmental Report Review Committee (ERRC) considered the sufficiency of the ND for the subject project. The case was continued for two weeks because of public concerns about possible contamination of groundwater;
 - August 6, 1975 - ERRC determined that an EIR should be prepared for the subject project. That action was based on the existence of a sufficient body of public opinion that an EIR should be required;
 - September 9, 1975 - Phoenix West Oil and Gas Corporation filed an Environmental Inventory and Summary Analysis of Environmental Effects with the County Environmental Resource Agency;
 - November 12, 1975 - ERRC found the EIR for CUP-3543 sufficient;
 - November 21, 1975 - Mr. S. H. Stewart appealed the November 12th, ERRC decision finding the EIR for CUP-3543 sufficient;

EXHIBIT 1

December 5, 1975 - The Environmental Quality Advisory Committee (EQAC) upheld the ERRC determination that the subject EIR was adequate;

296

December 13, 1975 - Mr. John R. Whitman appealed the December 5th, EQAC determination that the subject EIR was adequate;

January 13, 1976 - Your Board denied the appeal, finding the EIR to be sufficient.

(During the aforementioned appeal period, hearings were set before the Planning Commission for August 7, December 4, and December 18, 1975, but because of the appeals, the public hearing had to be rescheduled. Then, following the final appeal of the EIR before your Board, Mr. S. H. Stewart and Mr. E. E. Clabaugh, Jr., requested and received a continuance of a January 29, 1976 Planning Commission hearing until February 5, 1976 in order that they could be better prepared for the public hearing on the subject permit);

February 5, 1976 - Following the staff report and public testimony on the subject permit, the Planning Commission continued the hearing until March 4, 1976 in order to give the Planning staff time to resolve differences in suggested conditions submitted by Mr. Clabaugh at the March 4, 1976 Planning Commission meeting (see attached staff report and minutes of meeting); and

March 4, 1976 - The Planning Commission reviewed the staff analysis of the 33 suggested conditions which had been submitted by Mr. Clabaugh (see attached staff analysis). The Commission did not accept any new public testimony but made minor alterations to several conditions and approved the subject application, by a vote of 4 to 1, subject to 59 conditions (see attached Resolution, conditions and minutes of meeting). Furthermore, the Commission recommended that the Board of Supervisors authorize the Planning Division to develop guidelines for processing oil and gas permits as suggested by the Environmental Coalition (see attached Resolution No. 7330).

3. Conditions appealed by Phoenix West Oil and Gas Corporation:
(See attached Appeal and letter from Mr. William L. Peck.)

- A. Addressing Condition No. 16 in which a time limit of 25 years was imposed by the Planning Commission, Mr. Peck states that the average life of producing oil fields in Ventura County is 57 years and the prospect of a fixed term permit being terminated could have a major impact on the investment of future oil exploration in Ventura County.

Analysis: The County Counsel has advised the Commission that all use permits are required to have a time limit pursuant to Section 8163-3 of the Ventura County Ordinance Code. For reference, the Commission imposed a 25 year period on the subject permit and two other oil permits (CUP-3344 and CUP-3488) granted since that time. The purpose of the time limit is to allow the Commission the opportunity to reassess the compatibility of the permitted activity, should a renewal application be filed.

In 1948, the County granted many oil permits to oil producers in existing oil fields, without a time limit. Now, 28 years later, the Planning Commission would like the opportunity to review the installations of many of those 1948 permits for the purpose of updating their conditions. It appears that the Commission should be given the opportunity to review the subject permit after a similar length of time, if a producing well is attained.

ERRA MEMO
legibility of writing, typing or
printing: UNSATISFACTORY
in portions of the document
when received.

Recommendation: Uphold the Planning Commission's
Condition No. 16 which reads as follows:

297

16. That the permit is granted for a period of time of 25 years, ending April 27, 2001, or until the use for which it is granted is discontinued for a period of one hundred and eighty (180) consecutive days or more, whichever first occurs.

E. Addressing Condition No. 30 which controls the use of an emergency gas flare, Mr. Peck points out that a gas flare is necessary to prevent the escape of gas into the atmosphere and objects to having to submit a report to the Planning Director, each time emergency flaring occurs.

Analysis: The Planning Commission has received complaints of gas flaring which appeared to be more than an emergency situation in the past, in a similar location which was also exposed to a residential neighborhood (Nyeland Acres). The Commission felt that the subject condition, which was requested by the opponents of the application, would serve to clarify the use of such a flare and that the written reports would aid the staff in administering the subject permit.

Recommendation: Retain the language in the Planning Commission Condition No. 30 which states the following:

30. That a gas flare shall not be used unless there is no other possible method to get relief on the well, and then only in an emergency. For each flaring, a written report detailing the emergency shall be prepared and filed with the Planning Director within one week of the subject emergency.

C. Addressing Condition No. 40 which controls the use of lights during nighttime drilling activities, Mr. Peck fears that the imposed condition would prohibit the drilling contractor from providing a safe working condition for men working both in the mast and on the derrick floor and he would ask that the condition be reworded for clarity of purpose.

Analysis: The Planning Commission imposed the condition in order to eliminate intrusive or nuisance light which might blind a motorist at night or which might cause an otherwise dark room to become inordinately bright from an outside source.

Recommendation: Retain the Planning Commission's Condition No. 40 which requires the following:

40. That the facilities shall produce no light emanations which will interfere with the surrounding land uses including Koenigstein Road. Furthermore, all lights on the subject project shall be shielded from neighboring residences and roads subject to the approval of the Planning Director, upon advice from the Environmental Health Division.

D. Addressing Condition No. 50 which would require the permittee to station two flagmen near the intersection of Highway 150 and Koenigstein Road during the time in which any drilling rigs, tank trucks or other large trucks and equipment are being moved to and from the subject site, Mr. Peck objects to the condition as being punitive and unnecessary. He states that the permittee would not have control over all trucks coming to the site nor would there be any control over other oil drilling operators, also using Koenigstein Road.

ERA MEMO:
legibility of writing, typing or
printing UNSATISFACTORY
in portions of the document
when received.

Analysis: The Planning Commission imposed the subject condition after hearing testimony from residents along Koenigstein Road that large trucks frequently have difficulty making turns at the intersection of Highway 150 and Koenigstein Road. The hazard of trucks crossing the center line of the road or stopping to "jockey" back and forth to negotiate the turn was addressed by the Commission. The Commission imposed the condition to assure that trucks servicing the proposed use would not cause a traffic hazard to the community and directed the Planning staff to make "spot checks" at the subject intersection to assure that the condition would be complied with.

298

Recommendation: Retain Planning Commission Condition No. 50 which is designed to assure that the permit would be compatible in the Koenigstein Road area and which reads as follows:

50. That permittee shall provide at least two flagmen to be stationed near the intersection of Koenigstein Road and Highway 150 during any time in which any drilling rigs, tank trucks or other large trucks and equipment are being moved to or from the subject site.

- E. Addressing Condition No. 53 which would require the permittee to install a pipeline to transmit crude oil from the production site to a truck transfer station near Highway 150, or to an existing Atlantic-Richfield pipeline, Mr. Peck requests a rewording of the condition to allow more time for the permittee to install the subject pipeline.

Analysis: The Planning Commission imposed a pipeline installation time limit of six months from the time that oil production on the subject site reaches 350 barrels per day (or when more than two transport trucks would be required to traverse Koenigstein Road each day). Mr. Peck is concerned that six months may not be enough time for procurement of easements, developing engineering plans, filing a modification application (as required in Condition No. 54) for approval by the Planning Director or the Planning Commission for the installation of the subject pipeline. Two factors would appear to reduce Mr. Peck's concerns:

1. That according to the permittee, it is extremely unlikely that the subject exploratory well would produce 350 barrels per day; and
2. Before the permittee could reach that level of production, possibly from more than one well, they would have to file a modification application for either the additional wells or for the pipeline and the issue of timing could be more favorably addressed at that time.

Recommendation: Uphold Condition No. 53 imposed by the Planning Commission which states the following:

53. That at such time that daily oil production on the subject site either requires that more than two oil transport trucks to haul crude oil production from the subject site or a volume of 350 barrels of crude oil is reached, a product pipeline shall be installed within six (6) months of that date to eliminate tanker truck traffic, resulting from the subject permit, on Koenigstein Road.

- F. Addressing Condition No. 54 which requires the permittee to receive approval of a modification application for the oil pipeline, Mr. Peck requests that the Planning Director be authorized to approve the subject application. 299

Analysis: The main reason the Commission imposed the subject condition, was because of concerns expressed during the EIR hearings about the lack of information of the proposed pipeline. When imposing its condition, the Commission authorized the Planning Director to approve the pipeline plan if he considered the plan to be an insignificant, minor modification. Examples of the type of factors that would require Commission review and approval could include the following:

1. The pipeline route might impact an existing stream drainage system;
2. A determination that seismic forces could affect the pipeline; and
3. If a proposed truck transfer station would impact Highway 150 or other surface roads.

Recommendation: Retain Planning Commission Condition No. 54 which requires the following:

54. That prior to installing an oil pipeline from the subject site, a modification application shall be approved.

- G. Addressing Condition No. 58 which would not permit gas production, in absence of oil production, Mr. Peck requests that gas production be allowed without having to file a modification application for approval by the Planning Commission.

Analysis: The Commission imposed the subject condition upon the request of the opponents to the application, who pointed out that primary gas production was not addressed in the subject application or the EIR. If there are any problems with gas production, they could be best addressed through the modification process. Also, the Division of Oil and Gas reports that it is extremely unlikely that there would be any primary gas production in the Silverthread Field area.

Recommendation: Uphold the decision of the Planning Commission and impose Condition No. 58 which reads as follows:

58. That no gas production (in absence of oil production), storage or transport shall be permitted, unless a modification application for such a request is approved by the Planning Commission.

RECOMMENDED ACTION:

1. Find that this project may have a significant effect on the environment and certify that the attached Environmental Impact Report has been completed in compliance with C.E.Q.A. and the State EIR Guidelines issued thereunder, and that this body has reviewed and considered the information contained in the Environmental Impact Report;
2. Uphold the decision of the Planning Commission and deny the appeal; and

Board of Supervisors' Transmittal
April 27, 1976
Page 6; CUP-3543


ERA MEMO:
Legibility of writing, typing or
printing UNSATISFACTORY
in portions of the document
when received.

300

3. Adopt Planning Commission Resolution No. 7330 and authorize the Planning Division to develop guidelines for establishing oil and gas well permits, in keeping with current workload and budgetary constraints. (Note: Staff will discuss these budgetary constraints with your Board during the April 27th hearing.)

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY


Victor R. Husband
Planning Director

VRH:DS:dv/794

county of ventura

Victor R. Husbands, Director
Planning

November 15, 1977 (Agenda)

391

Board of Supervisors
County of Ventura
Courthouse
501 Poli Street
Ventura, California 93009

ERA MEMO
legibility of writing, typing or
printing UNSATISFACTORY
in portions of the document
when received.

Subject: Appeal of Modification of Conditional Use Permit
No. CUP-3543 by the Permittee, Phoenix West Oil and
Gas Corporation and Mr. John Whitman, a resident in
the Upper Ojai Valley.

STATEMENT OF MATTER FOR BOARD CONSIDERATION:

Phoenix West Oil and Gas Corporation (Appeal No. 1) is appealing two (2) conditions (Nos. 56 and 57) imposed on a Conditional Use Permit granted by the Planning Commission for a permit to drill five (5) additional oil and gas wells on an existing drill site. Mr. John Whitman (Appeal No. 2) is appealing the Planning Commission's decision in granting the permit.

COMMISSION TESTIMONY AND PROPOSED FINDINGS:

1. Location and Parcel Number: The subject drilling and production site is a 250 foot by 250 foot, 1.5 acre portion of a 144.5 acre parent parcel, located approximately 450 feet north of Koenigstein Road, at a point approximately one-half of a mile north of Highway 150 in the Upper Ojai Valley and approximately seven miles north of the city limits of Santa Paula. The Assessor's Parcel No. is 40-010-52;
2. Zoning: The existing zoning on the subject property is "O-S-20Ac" (Open Space, Twenty Acre Minimum) adopted September 21, 1976 (Ordinance No. 3230);
3. History: On March 3, 1976, the Planning Commission approved CUP-3543 for the drilling of one exploratory oil well, subject to 58 conditions. As a result of an appeal on this decision by the applicant, the Board of Supervisors, on April 27, 1976, modified six conditions of this permit. Subsequently, Mr. John Whitman, et al., initiated litigation in the Superior Court on June 4, 1976, in order to determine the adequacy of the related Environmental Impact Report. On May 10, 1977, the Superior Court found that the document was adequate. On May 18, 1977, the plaintiffs appealed the Superior Court decision to the State District Court of Appeals. The appeal is pending at this time. However, in absence of an injunction, the applicant initiated drilling operations for the subject well on September 26, 1976. On October 26th, the drilling rig was removed from the site and after testing the soil formations, the well went "on production" in December, 1976. On September 22, 1977, the Planning Commission approved a Modification of CUP-3543 to drill five additional oil and gas wells, subject to 63 conditions;
4. EIR/ND: On July 26, 1977, the Environmental Assessment Committee (EAC) determined an Addendum to the original EIR for CUP-3543 should be prepared, addressing the cumulative effects of this project (the drilling of five wells) and other pending and probable projects in the area. This determination was appealed by the

B-7

EXHIBIT NO. "1"

applicant to the Environmental Report Review Committee (ERRC) and subsequently to your Board for final resolution. On August 2, 1977, your Board determined that the environmental effects of CUP-3543 and the environmental effects of this proposed modification are similar enough to warrant the same treatment in an EIR and that the original EIR adequately covers the impacts of this proposed modification. The findings of the original EIR indicate that significant effects could occur with respect to movement of large vehicles at the intersection of Koenigstein Road and Highway 150, noise, grading, hydrology, geology, visual, archaeology, the removal of plant and wildlife, fire hazards and cumulative impact of the project in the area. Pursuant to Section 15088 of the State EIR Guidelines, mitigation measures have been presented in this staff report that reduce to acceptable levels the significant effects identified therein;

5. Description of Request: The applicant proposes to drill five additional oil and gas wells from an existing drilling site where a successful oil and gas well was discovered in December, 1976. If the request is approved, Condition No. 21 (which permitted one exploratory well) would be amended to permit not more than six oil and gas well drilling projects from six well locations as approved by the State Division of Oil and Gas (DOG). Drilling operations would be conducted by the use of portable drilling equipment (Condition No. 22) and each drilling project would take approximately five weeks. All drilling fluids would be accumulated in steel tanks and hauled away from the site for disposal at an approved disposal site (Condition No. 23).

In the future, when the volume of oil production requires the use of more than two tanker trucks per day or reaches 350 barrels per day, the permittee would be required to install an oil pipeline that would eliminate the need for tanker trucks using Highway 150 (Condition Nos. 29, 30 and 32). Also, no more than 100,000 cubic feet of natural gas per day shall be permitted to be produced on the subject site (50,000 cubic feet per day is now being vented to the atmosphere), thereby requiring that a pipeline be installed to transmit natural gas to market (Condition Nos. 31 and 32). In the event that future wells on the subject site should require additional energy stimulation (secondary recovery by gas, steam, water injection, etc.) to increase production rates, a modification application would be filed for approval by either the Planning Commission or the Planning Director, depending on the known environmental impacts, subject to advice from the DOG (Condition No. 18). Therefore, the proposed use is one conditionally permitted in the "O-S" zone pursuant to Ordinance Code Section 8143-6.2;

6. Existing Natural Features: The subject 1.5 acre permit area is characterized by two generally level pads, one 130 feet by 200 feet, used as a drilling site and the other, 70 feet by 100 feet, that has been recently graded for a production tank farm (see Exhibit No. "2"). Mr. Robert Lopez, Ventura County Archaeologist, visited the subject property during grading operations and did not find any archaeological sites. The applicant states that there will be no additional grading required for the subject project. However, although no further grading projects are planned for the subject request, an archaeologist should be consulted, if any new grading is requested (Condition No. 58). Therefore, with appropriate conditioning, the subject site would be physically suitable for the type of land use being proposed;

7. Existing Land Use: The existing uses on the subject property include a pumping oil and gas well that produces approximately 100 barrels of oil and 50,000 cubic feet of natural gas per day. The oil is accumulated within two temporary tanks that are presently located south of the pumping well and is transported to market

via approximately one tanker truck per day. The natural gas is presently being vented to the atmosphere, since the applicant has not been able to establish suitable means of marketing this product. The Air Pollution Control District (APCD) would require that all produced natural gas be flared (with a shielded flare to reduce glare) to reduce air pollution within the Upper Ojai Valley. Said flaring shall begin as soon as permanent tankage is installed on the subject permit area (Condition Nos. 49 and 52). When existing production of natural gas is doubled (100,000 cubic feet per day), the permittee would not be permitted to produce more gas without first finding a market and installing a pipeline (Condition Nos. 31 and 32), in order to conserve a valuable natural resource.

Although the applicant has completed grading of a tank farm site on the subject property, he has not installed any permanent tanks or landscaping to date. He states that he has withheld work on these items, pending approval of the subject modification application. However, a landscaping plan would be submitted for approval, within 30 days following the granting of this permit and the installation of said landscaping would be implemented, subject to a phasing schedule, approved by the Planning Director (Condition No. 25). All temporary oil production tanks would be removed from the site within 60 days following a test period for a second oil well (Condition Nos. 39 and 52). Therefore, with appropriate conditioning, the proposed use would be compatible with the land uses presently on the subject property;

8. Adjacent zoning: Zoning on adjacent property is "rural" in nature and includes:

North, South and East: "R-E-1Ac" (Rural Exclusive, One Acre Minimum)

West: "R-E-1Ac" and "O-S-20Ac"

Therefore, with appropriate conditioning, the proposed use would be compatible with uses permitted by the zoning on adjoining properties;

9. Adjacent Land Uses: A major oil field (Silverthread) is located to the south, southeast and southwest of the subject site. Approximately 200 wells have been drilled in this area since 1868.

It has been estimated that approximately 320 persons live in the general area. Most of the dwellings are clustered near Sisar Road, three-quarters of a mile to the southwest of the subject site. Other dwellings are located along Koenigstein Road, approximately one-half of a mile south and east of the subject site. "Rancho Del Oso" (two dwellings) is located approximately one-quarter of a mile north of the subject site in Bear Canyon, separated from the proposed drilling and production operation by a hill.

During the drilling of the initial well on the subject site, the Environmental Resource Agency received one complaint of drilling noise, that from a resident at Rancho Del Oso. Mr. Irv Johnson, Environmental Health Division, visited the complainant's property, but was not able to record any drilling noise readings above the ambient noise levels in the neighborhood. The Environmental Health Division recommends that a noise condition, similar to the condition that was imposed on the Atlantic Richfield Company Permit (CUP-15) be imposed on the subject permit to protect against any hazard to health that might result from said drilling operations (Condition No. 42).

During the August 2nd Board hearing of the EIR Addendum appeal, Mr. John R. Whitman, resident of Rancho Del Oso, submitted a letter to your Board that listed several alleged violations of the subject permit. Your Board directed the applicable County staffs to review Mr. Whitman's allegations as well as all the conditions of the subject permit and report back to the Board within two weeks. On August 16, 1977, your Board reviewed the staff's report and directed the staff and the applicant to work together and if there were any problems, bring the matter back to your Board within 30 days. Because there was no clear violation of the permit, no further action has been necessary. Therefore, with appropriate conditioning, the proposed use would be compatible with adjacent land uses;

10. Services: The drilling rigs would be operated by self-generated power. Water would be maintained in storage tanks on the site (the Ventura County Fire Department requires a 500 barrel storage tank; Condition No. 61), while sewage disposal would be by means of a chemical toilet. Therefore, with appropriate conditioning, there would be adequate provisions for water and sanitation to ensure that the proposed use would not be detrimental to public health;
11. General Plan: The Open Space Element of the Ventura County General Plan and the Ventura County 1985 General Plan (Land Use Element) designate the subject property as "Open Space" and "Mountainous", respectively. Therefore, the subject proposal is consistent with the objectives, policies, general land uses and program of the General Plan;
12. City and Jurisdictional Comments: The Cities of Ojai and Santa Paula and the Citizens to Preserve the Upper Ojai were invited to review and comment on the CUP proposal. Ms. Kristin Duncan, Planning Director, City of Santa Paula, has been the only respondent, stating the City's concerns of truck traffic generated by the subject project on Highway 150, which traverses their City and possible pollution of Santa Paula Creek (see Exhibit No. "5"). Both concerns are mitigated by the conditions of the subject permit (Condition Nos. 23, 29, 30 and 62);
13. Development Advisory Committee: On August 26, 1977, the applicant's representatives met with representatives of the Public Works Agency, the Environmental Health Division, the APCD and the Planning Division to review the recommended conditions of approval. During said meeting, the applicant's representatives expressed concern about a number of conditions that were eventually resolved, prior to and during the Planning Commission hearing. However, from the outset, the applicants have expressed total dissatisfaction with Public Works Agency Condition Nos. 56 and 57 (see the following Finding No. 14 and analysis);
14. Traffic Circulation: Access to the site would originate within the city limits of Santa Paula and proceed along Highway 150 to its intersection with Koenigstein Road. Thence, northeasterly approximately one-half of a mile along Koenigstein Road to the entrance to a one-quarter of a mile long access road which leads to the subject site. The latter roadway runs in a northwesterly direction and lies entirely within the 144 acre parent parcel.

The traffic volume on Koenigstein Road is approximately 50 average daily trips (ADT) and on Highway 150 the volume is approximately 3,000 ADT. The subject project would add an additional volume of 40 ADT during each drilling stage and four ADT, if production is continued.

The Public Works Agency states that the intersection of Koenigstein Road and Highway 150 has a "seriously deficient intersection configuration," partially due to the bridge on Koenigstein Road

being immediately adjacent to Highway 150. Said bridge has a narrow width and no turning radii to facilitate turning movements. Most vehicles must come to a near stop on Highway 150 to make the turn and if a vehicle is on the bridge, the condition becomes significantly worse. Public Works states that trucks cannot make this turn without serious problems.

Koenigstein Road has varying widths of paving over the straight route to the subject site. One section of paving is only 14 feet wide, a situation which presents a potential hazard for vehicles driving in opposite directions.

On the original permit, the Planning Commission, upheld on appeal by your Board, imposed a condition requiring the use of flagmen, whenever a large truck could not make a legal turn at the intersection of Koenigstein Road and Highway 150. It should be recognized that the original application for the subject permit requested only one exploratory well. The permittee applied to CALTRANS for an encroachment permit pursuant to Condition No. 50, to move their drilling rig over the State highway both before and after the initial drilling operation. Other than those two major movements of equipment, which required flagmen both east and west of the subject intersection, no other encroachment permits were necessary, according to the applicant. It was determined that only the right-hand turn from Highway 150 onto Koenigstein Road is difficult for large trucks to maneuver because of the narrow bridge adjacent and north of Highway 150. It was found that if the driver would continue westerly along Highway 150 to the Ojai Oil Company permit area (CUP-293), located on the north side of Highway 150 and approximately 1000 feet east of the County Fire Station, then turn the truck around on private land (with the property owner's approval), the driver could return to said intersection and make a legal left-hand turn onto Koenigstein Road. In driving south on Koenigstein Road and turning onto Highway 150, a legal left-hand turn can be negotiated. Condition No. 28 (formerly No. 50) has been amended to require that the permittee continue directing all drivers that use the subject site, to make "only legal turns" at said intersection.

However, at the present time, Ventura County has received four pending applications for 14 additional drilling sites in the Koenigstein Road area. Related EIR's are currently being prepared for these applications. Argo Petroleum Corporation has filed two applications (CUP-3688 and CUP-3745) for a total of ten drilling sites and the applicant has filed two applications (CUP-3685 and Modification of CUP-3543) for a total of four additional drilling sites (initial inquiries with the two applicants indicate that there would be no more than one drilling rig operating for each new permit at any one time). For reference, Argo does not intend to use the subject Koenigstein Road-Highway 150 intersection. Argo personnel have indicated that they feel confident that they will be able to acquire a road easement from Highway 150 near the Summit area, through the Ojai Oil Company leased land (and other property) to a point in Koenigstein Road near the subject Phoenix West production site.

The Public Works Agency states that the present road and bridge configurations are substantially below standard and create serious traffic safety problems. However, the first order of priority is to correct the poor intersection condition at Koenigstein Road and Highway 150 by widening the bridge (Condition Nos. 56 and 57). The other aforementioned oil permits, if approved, would be conditioned to widen Koenigstein Road and to make other necessary improvements if Public Works determines that the additional traffic warrants said action. Also, Public Works states that the

adequacy of the bridge is not primarily related to numbers of vehicles but to basic minimum road geometrics; that if the applicant chooses to use an alternate, approved access route, then this would also solve the problem. Therefore, with appropriate conditioning, as recommended by the Public Works Agency, there would be adequate provisions for access to serve the proposed use;

APPEAL NO. 1: Phoenix West states in their appeal (see Exhibit No. "3"), "There are a number of conditions which we feel are unnecessary and unduly burdensome. However, Conditions Nos. 56 and 57 (for bridge improvements) are unfair and intolerable and the applicant should not be burdened with their unreasonable and discriminatory obligations". Although the applicant has stated that certain conditions are "unnecessary and unduly burdensome" (for reference, the applicant has not specified any other conditions), he has indicated that they would be acceptable except for Condition Nos. 56 and 57, which he has appealed.

Analysis: The Public Works Agency reiterates their position that both the subject bridge and pavement in Koenigstein Road are sub-standard and should be improved. It is your Board's policy to require road access improvements of a developer, when it is determined that a requested project is likely to impact that access. Commissioner Spencer, in making his motion for approval of the application, stated, "that due to the overwhelming impact of the oil companies on the road and in the local area, they must take that responsibility of improving those roads".

In Condition Nos. 56 and 57, the Public Works Agency has focused only on the bridge deficiency at this time and has given the appellant an option of either improving said bridge or using an alternate access road to reach their subject drill site. The latter option would appear to be a reasonable solution available to the appellant. By Condition No. 34, the appellant would be required to receive approval from the Planning Division, that all applicable conditions of the permit have been met, prior to receiving approval to commence drilling each well;

APPEAL NO. 2: Mr. John Whitman states in his appeal that the "Permit violates my health, welfare and safety and does not take into account feasible alternatives and feasible mitigating measures" (see Exhibit No. "4").

Analysis: Please refer to Planning Commission Finding Nos. 4, 5, 7, 8, 9, 10 and 14, which relate to the health, safety and welfare of said project;

15. Ordinance Compliance: Based upon the information and findings expressed during the September 22, 1977 public hearing, the Planning Commission determined that the application, with all the attached conditions, meets the requirements of Ventura County Ordinance Code Section 8163-3 in that:
- a. The proposed use would be compatible with existing and future land uses within the zone and the general area in which the proposed use is to be located;
 - b. The proposed use would not be obnoxious or harmful to adjacent properties;
 - c. The proposed use would not impair the integrity and character of the zone in which it is to be located; and
 - d. The proposed use would not be detrimental to the public interest, health, safety, convenience, or welfare;

16. Planning Commission Action: Following the County staff's presentation the applicant agreed to suggested amendments to the recommended conditions by the staff and Commissioners regarding a drilling time limit, landscaping, flaring of natural gas and permanent tankage (Condition Nos. 14, 25, 49 and 52). The applicant strongly opposed aforementioned Condition Nos. 56 and 57.

Two persons spoke in opposition to the application. Mr. S. E. Stuart urged the Commission to impose Condition No. 56, if the permit should be granted. Mrs. John Whitman (Mr. Whitman was not present) implied that the application should be denied, she criticized the location of the production tank farm on the subject property and asked that all production facilities be screened similar to installations she had seen in Hacienda Heights, Los Angeles County. She also questioned how they can sell her property with the proposed oil activity taking place and wondered, "What's going to happen when it is all through?"

The Planning Commission deliberated on the matter and upon a motion by Commissioner Spencer, seconded by Commissioner Green, certified the original project EIR, adopted the proposed findings and approved Modification of CUP-3543, subject to the recommended conditions, as amended during the hearing (attached). The motion passed by a vote of 4 - 1 (Commissioner Zogg dissenting). Chairman Meek stated, "It is unfortunate in many respects that business effects residents; however, I suppose it's been said a hundred times, they are going to drill where the oil is. I note there is a concession in one respect that there will be six wells on one site instead of six wells from six production sites".

Commissioner Zogg stated, "I cannot, in good conscience, certify the EIR for this project; it should have been made a part of the EIR for the other pending oil permit applications in the area". He further stated that, "I believe oil should be produced, but not at the devastation of natural resources such as the air quality in the area and the waste of natural gas".

RECOMMENDED ACTION:

1. Find that the environmental effects of oil development discussed in the EIR prepared for CUP-3543 and the environmental effects of this proposed modification are similar enough to warrant the same treatment in an EIR, and certify that the original project EIR adequately covers the impacts of this proposed modification, and pursuant to Section 15088 of the State EIR Guidelines, endorse the mitigation measures which have been presented in this staff report for reducing the significant impacts identified in the EIR that was earlier prepared for CUP-3543; and
2. Uphold the decision of the Planning Commission and deny the appeals.

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY


Victor R. Husband, Director
Building and Planning Services

ERA MEMO:
Legibility of writing, typing or
printing UNSATISFACTORY
in portions of the document
when received.

VRH:jem

APPENDIX C
MINUTES OF BOARD OF SUPERVISORS HEARING

ENVIRONMENTAL
SOURCE AGENCY

BOARD OF SUPERVISORS, COUNTY OF VENTURA, STATE OF CALIFORNIA

TUESDAY, APRIL 27, 1976, AT 9:00 O'CLOCK A. M.

41 10 10 42 AM '76

288

1.8 CUP-3543

HOLDING HEARING ON APPEAL RE CUP-3543,
PHOENIX WEST OIL AND GAS CORPORATION

This is the time and place heretofore set for hearing regarding the appeal of Phoenix West Oil and Gas Corporation on conditions imposed by the Planning Commission for Conditional Use Permit No. 3543, Upper Ojai Area. Communications are received and filed with the records of the Board, and Exhibits offered into evidence are filed in the Planning Department.

The hearing is held, and presentation regarding the matter is given.

The hearing is closed, and after discussion and due deliberation, the Board takes the following actions:

ERA MEMO:
Legibility of writing, typing or
printing UNSATISFACTORY
in portions of the document
when received.

- - Upon motion of Supervisor Jones, seconded by Supervisor Grandsen, and duly carried, it is moved that the permit be granted subject to conditions as modified, attached hereto and made a part of these minutes.
- - Upon motion of Supervisor Grandsen, seconded by Supervisor Flynn, and duly carried, the period of time in Condition No. 16 is changed from 25 years to 50 years.
- - Upon motion of Supervisor Flynn, seconded by Supervisor Jones, and duly carried, a requirement is added to Condition No. 16 for review of the site and conditions of the permit at least every ten years during the life of the permit.
- - Upon motion of Supervisor Jones, seconded by Supervisor Grandsen, and duly carried, the requirement in Condition No. 30 to provide that for each flaring, a report detailing the emergency shall be provided to the Planning Director within one week of the subject emergency is retained as a part of the condition as recommended by the Planning Commission.
- - Upon motion of Supervisor Grandsen, seconded by Supervisor Jones, and duly carried, the sentence beginning with the word furthermore is deleted from Condition No. 40.
- - Upon motion of Supervisor Jones, seconded by Supervisor Flynn, and duly carried, it is moved that Condition No. 50 be included.
- - Upon motion of Supervisor Jones, seconded by Supervisor Grandsen, and duly carried, Condition No. 53 is modified to provide that a product pipeline shall be installed within six (6) months after the modification is approved.
- - Upon motion of Supervisor Jones, seconded by Supervisor Grandsen, and duly carried, Condition No. 54 is modified by adding that modification application shall be approved by either the Planning Commission or the Planning Director.
- - Upon motion of Supervisor Jones, seconded by Supervisor Grandsen, and duly carried, Condition No. 58 is deleted.
(Condition No. 59 of the conditions recommended by the Planning Commission is renumbered by staff and becomes Condition No. 58,

of the conditions approved by this Board as adopted, modified and renumbered),

- - Upon motion of Supervisor Grandsen, seconded by Supervisor Jones, and duly carried, grants the appeal, certifies the Environmental Impact Report, and approves Recommendation No. 3 in the Planning Department letter concerning development of guidelines.

ERA MEMO:
Legibility of writing, typing or
printing UNSATISFACTORY
in portions of the document
when received.

COPIES TO:

Planning (2)
Assessor
Public Works
Applicant
Files (2)
Item 41
4/27/76
SW

PACIFIC COAST COURT REPORTERS

CHARLENE L. OLESON
CALIFORNIA CERTIFIED
SHORTHAND REPORTER NO. 3023



1151 East Main Street
Ventura, California 93001
EO5 648-7961 485-8631

TUESDAY, NOVEMBER 15, 1977, AT 9:00 O'CLOCK A.M.

* * * * *

1.8 CUP-3543

HOLDING HEARING ON APPEALS RE CUP-3543,
PHOENIX WEST OIL and GAS CORPORATION

This is the time and place heretofore fixed for public hearing on appeal of Modification of Conditional Use Permit No. CUP-3543 by the Permittee, Phoenix West Oil and Gas Corporation, and Mr. John Whitman, a resident in the Upper Ojai Valley. Notice of the hearing was duly given as provided by law, and in accordance with established procedures. Written material is received and filed with the records of the Board in this matter.

The hearing is held, and the following persons are heard in the matter:

- - Don Sperling, Planning staff, who reviews the staff report, conditions, environmental impact report, Exhibits 5-25, transparencies and slides.

- - Don Betlach, Public Works staff, who reviews Exhibits 26, 27, and 28, being maps displayed on the wall, and slide Exhibits 29-36.

- - Mrs. Stewart, who presents 4 prints showing Koenigstein Road, marked as Exhibit B.

- - William Peck, Attorney representing Phoenix West.

- - Bob Richardson, Petroleum Engineer, appearing on behalf of Phoenix West.

- - Dick Berger, Argo Petroleum, who comments on an alternative access road.

- - John Whitman, resident, Upper Ojai Valley.

- - Bob Whitman, resident, Upper Ojai Valley.

- - Bob Andrews, resident, Upper Ojai Valley.

- - Agnes Baron, Sulphur Mountain Road.

- - Jim McPherson, resident, Upper Ojai Valley.

- - James J. Davy, Upper Ojai Valley area.

ERA MEMO:
Legibility of writing, typing or
printing UNSATISFACTORY
in portions of the document
when received.

- - Rusty Bostwick, who reads a statement.
- - Nancy Whitman, who presents two photographs of the La Habra Oil Fields, marked as Exhibit C, and a sketch of the drilling site, with overlays, marked as Exhibit D.
- - S. A. (Stu) Stewart, Upper Ojai Valley area.
- - Janice Stewart, Upper Ojai Valley area.
- - Virginia Lane, Upper Ojai Valley area.
- - John Long, Sulphur Mountain Road area.

At 6:05 p.m., the Board closes the hearing as to public testimony, and continues the matter to November 22, 1977, at 1:30 p.m. for the rebuttal portion of the hearing.

COPIES TO:

ERA-Planning Div.
Public Works Agency
Phoenix West
William Peck
John Whitman
Robert Richardson
S. H. Stewart
Martha Moore
Files (2)

Item 45-11/15/77 sw

BOARD OF SUPERVISORS, COUNTY OF VENTURA, STATE OF CALIFORNIA

TUESDAY, NOVEMBER 22, 1977, AT 9:00 O'CLOCK A.M.

* * * * *

405

1.8 CUP-3543

HOLDING FURTHER HEARING ON APPEALS RE
CUP-3543, PHOENIX WEST OIL & GAS CORP.

This is the time heretofore fixed by the Board for further hearing on the appeal of Mr. John Whitman, and the appeal of the Phoenix West Oil and Gas Corporation, concerning conditions imposed by the Planning Commission on Conditional Use Permit No. CUP-3543, said matter having been continued from the meeting of Tuesday, November 15, 1977.

The following persons are heard in the matter: William Peck, Attorney, and Bob Richardson, Petroleum Engineer, appearing on behalf of Phoenix West; S. H. Stewart, appearing on behalf of Mr. Whitman; and Al Knuth, Road Commissioner. Mr. Peck presents six photographs marked as Exhibit E.

After discussion of the proposed modification of conditions, the Board instructs staff to work out proposed wording for Condition No. 56, and come back to the Board later in the meeting.

The Board takes a recess from 3:40 p.m. to 5:15 p.m., at which time the Board reconvenes with all members being present.

After discussion and due consideration, it is moved by Supervisor Jones, seconded by Supervisor Eaton, and duly carried, with Supervisor MacDonald objecting, to deny both appeals, modify Condition No. 56, and accept the Planning Commission's recommendations on the EIR. The conditions, as modified, are attached hereto and made a part of this item.

ERA MEMO:
Legibility of writing, typing or
printing UNSATISFACTORY
in portions of the document
when received.

C-6

COPIES TO:
Mr. & Mrs. John Whitman
Mr. S. H. Stewart
Martha P. Moore
Mr. David Hanson, Phoenix West
Mr. William Peck, Attorney
Mr. Richard Richardson
ERA-Planning Division
Public Works Agency
Files (2)
Item 44 - 11/22/77 sw

APPENDIX D

CUP-3543 PERMIT CONDITIONS ADOPTED BY
THE VENTURA COUNTY BOARD OF SUPERVISORS ON
NOVEMBER 22, 1977

17/1
CONDITIONS FOR: CUP 3543

APPLICANT: Synconix West Oil & Gas Co.

RESOLUTION NO: 77-54

PAGE: 2

404

That CUP-3543 be modified by amending all the conditions of the permit to read as follows:

PLANNING DIVISION CONDITIONS:

All conditions (1 through 11) as listed in Section 8163-14 of the Ventura County Ordinance Code and the following:

12. That the permit is granted for the land as described in the application and any attachments thereto, and as shown on the plot plans submitted labelled Exhibit "2".
13. That drilling operations, including all equipment and other appurtenances accessory thereto, shall be limited to the drilling site located as described in the application and as shown on the plot plans submitted labelled Exhibit "2".
14. That drilling operations for the second well on the subject site shall be commenced within one year of the time the permit is granted, or the permit for the five (5) additional wells shall automatically expire. Furthermore, the completion of well Nos. 2 through 5 shall be accomplished within four (4) years of the granting of this permit. The Planning Director would be authorized to extend the well completion date for not more than 12 months based upon advice from the State Division of Oil and Gas.
15. That the permit is granted for a period of time of 50 years, ending April 27, 2026, or until the production of hydrocarbons is discontinued for a period of one hundred and eighty (180) consecutive days or more, whichever first occurs. The Planning Division shall review the site and conditions of the permit, at least every year during the life of the permit, to ensure that full compliance with all conditions has been accomplished.
16. That upon revocation, expiration or surrender of this permit, or abandonment of the use, the premises shall be restored by the permittee to the conditions existing prior to the issuance of the permit as nearly as practicable.
17. That any minor changes may be approved by the Planning Director, but any substantial changes will require the filing of a modification application to be considered by the Planning Commission.
18. That "secondary recovery" operations may be permitted, for the proposed wells subject to approval by either the Planning Commission or the Planning Director, depending on the known environmental impacts based upon advice from the State Division of Oil and Gas.
19. That all requirements of any law or agency of the State, Ventura County and any other governmental entity shall be met.
20. That any road grading or site preparation, where the total amount of earth to be moved exceeds 500 cubic yards, shall require the preparation of an engineered grading plan, subject to approval of the Planning Director, upon advice from the Public Works Agency, prior to commencement of such grading or preparation. A fee, pursuant to ordinance, based upon actual time spent in reviewing said plans and inspection at the subject site, shall be paid to the Public Works Agency.
21. That the permit is granted for a total of six (6) oil and gas well drilling projects (one has been completed), drilled from not more than six (6) well locations, as approved by the State Division of Oil and Gas.
22. That drilling and redrilling shall be conducted by the use of portable drilling equipment, and no permanent derricks shall be installed.

CONDITIONS FOR: CUP-3543

APPLICANT: Phoenix West Oil & Gas

RESOLUTION NO: 77-54

PAGE: 3

ERA MEMO:
 Legibility of writing, typing or
 printing UNSATISFACTORY
 in portions of the document
 when received.

PLANNING DIVISION CONDITIONS: (Con't)

23. That all liquid drilling discharge wastes shall be accumulated in steel tanks on the subject drilling sites and hauled away from the subject property for disposal at any approved disposal site, and such steel tanks shall be removed within thirty days after completion or abandonment of the subject wells. However, solid drilling waste materials may be temporarily deposited in an earthen depression with the final disposition of said solid waste materials to be accomplished in compliance with the rules and regulations of the California Regional Water Quality Control Board.
24. That not more than six (6) production tanks shall be installed on the subject site, neither one of which shall have a rated capacity in excess of 1,000 barrels, and said tank or tanks and appurtenance shall be painted a neutral color and maintained in good condition at all times; and the plans for said tank or tanks, including the plot plan showing the location thereof on the property, shall be submitted to and approved by the Planning Director in writing before said tank or tanks and appurtenances are located on the premises.
25. That within 30 days following the granting of this permit, a landscaping plan shall be submitted to the Planning Director for approval. The Planning Director shall have the authority to approve a phasing schedule for implementing the approved plan. The permittee shall bear the total cost of the landscaping plan review and initial planting inspection by the County's Landscape Consultant. A fifty dollar deposit for this purpose is required at the time plans are submitted.
26. That no sign shall be constructed, erected or maintained on the property encompassed by this permit except those allowed by law or ordinance to be displayed in connection with the drilling or maintenance of the well. The location of all directional signs shall be subject to the affected property owner's approval.
27. That all of the vehicular access roadway from the County right of way (in Koenigstein Road) and including the route around and within the subject permit area, shall be surfaced with oil and maintained in good condition at all times.
28. That the permittee shall require that all truck drivers who drive to the subject permit area, refrain from making an illegal right-hand turn (crossing the roadway centerlines) from Highway 150 onto Koenigstein Road. That if said turn cannot be legally negotiated, the driver shall proceed to the Summit area, (where the permittee shall obtain permission from the affected property owner), turn around on private property, return to the intersection of Koenigstein Road and Highway 150 and make a legal left-hand turn. If a legal turn cannot be negotiated in this manner (such as for a drilling rig), a permit shall be required from Caltrans and the movement of oversize vehicles shall be subject to said permit requirements.
29. That no more than two tanker trucks per day shall be permitted to haul oil from the subject permit area.
30. That not more than 350 barrels of crude oil per day shall be produced from the subject permit area unless a product pipeline is installed to eliminate the need for tanker trucks using Highway 150.
31. That no more than 100,000 cubic feet of natural gas produced from the subject site, shall be flared per day.
32. That prior to installing an oil or a gas pipeline from the subject site, a modification application shall be filed for approval by either the Planning Commission or the Planning Director, depending on the known environmental impacts of installing the subject pipeline.

CONDITIONS FOR: CUP-3543

APPLICANT: Phoenix West Oil & Gas

RESOLUTION NO: 77-54

PAGE: 4

PLANNING DIVISION CONDITIONS: (Con't)

411

33. That prior to any drilling, the permittee shall be responsible for informing surface property owners and drilling contractors of all the conditions of the permit and shall confirm such notification in writing to the Planning Director.
34. That prior to inauguration of drilling operations, (i.e. spudding-in) approval shall be obtained from the Planning Division of compliance of all applicable conditions of the permit.
35. That at least once each month, from the spudding-in time of each drilling well, until it goes on production, the permittee shall inform the Planning Director in writing as to the progress of each well, following the spudding-in operation.
36. That the permittee shall maintain on file with the Planning Director a certification showing insurance of not less than Five Hundred Thousand/One Million Dollars for personal injury and Two Million Dollars for property damage.
37. That any oil spills from pipes or other facilities or the well shall be cleaned and corrected in accordance with the E.P.A.'s Spill Contingency Plan.
38. That no later than ten (10) days after any change of property ownership or of lessee(s) or operator(s) of the subject use, there shall be filed with the Planning Director the name(s) and address(es) of the new owner(s), lessee(s) or operator(s), together with a letter from any such person(s) acknowledging and agreeing to comply with all conditions of this permit.
39. That all temporary oil production tanks, not required for further drilling operations, shall be removed from the subject permit area within 60 days of "going on production" of a second oil well on the subject site.

ENVIRONMENTAL HEALTH DIVISION CONDITIONS:

40. That suitable and adequate sanitary toilets and washing facilities approved by the Environmental Health Division, shall be installed and maintained in a clean and sanitary condition at all times during periods of drilling.
41. That an adequate supply of safe and potable water shall be supplied to the site as approved by the Environmental Health Division.
42. That noise emanation shall be controlled so as not to interfere with surrounding land uses. Noise emanations from a drilling well or production equipment shall not exceed standards set by HUD's Report No. TE/NA 72. The maximum noise levels shall not exceed 45 dB(A) (measured at point five feet away from the outside wall of an occupied residence or school) during nighttime hours and 55 dB(A) during the daytime. If, based on a valid complaint, a pumping well impacts an occupied residence or school, it shall be operated by an electrically powered unit.
43. That light emanation shall be controlled so as not to interfere with surrounding land uses, including Koenigstein Road.

CONDITIONS FOR: CUP-3543

APPLICANT: Phoenix West Oil & Gas

RESOLUTION NO: 77-54

PAGE: 5

ERA MEMO:

Legibility of writing, typing or
printing: UNSATISFACTORY
in portions of the document
when received.

ENVIRONMENTAL HEALTH DIVISION CONDITIONS: (Con't)

44. That all facilities shall be constructed and operated in accordance with the California Division of Industrial Safety's General Industry safety Orders, and the U.S. Department of Labor's Occupational Safety and Health Standards.
45. That disposal of any potentially hazardous wastes shall be by a means approved by the Ventura County Division of Environmental Health.
46. That any abandoned water wells on the permittee's drilling or production equipment sites shall be destroyed in accordance with the Ventura County Well Ordinance.

AIR POLLUTION CONTROL DISTRICT (APCD) CONDITIONS:

47. That facilities shall be constructed and operated in accordance with the Rules and Regulations of the Ventura County Air Pollution Control District.
48. That analysis indicating the sulphur content of the gas and oil shall be obtained and transmitted to the County Air Pollution Control District when first practicable and within ten days of any flaring and production.
49. That upon compliance with Condition No. 52, no venting to the atmosphere of well head gas shall occur. If a gas line or other method of transporting the gas is not available, the gas shall be flared in a manner acceptable to the APCD and the Planning Director.
50. That producing well equipment (i.e., rod pumps, intermittent gas lift, etc.) shall be routinely maintained in a manner representative of good oil industry practices so as to minimize air pollution emissions.
51. That all valves, flanges, and connections shall be routinely maintained (i.e., tightening and replacing packings) in a manner representative of good oil industry practices so as to minimize air pollution emissions.
52. Installation of permanent tankage shall be commenced not later than thirty (30) days following the completion of a thirty-day production test period of the second well drilled and completed on the site (the first well to be drilled and completed subject to this modification), and shall be completed not later than sixty (60) days following the test period.
53. That all "permanent" oil storage tanks shall have vapor recovery equipment which reduces emissions to the atmosphere by at least 90% or a control system acceptable to the APCD.
54. That all "permanent" oil transfer operations shall have vapor recovery equipment which reduces emissions to the atmosphere by at least 90% or a control system acceptable to the APCD.
55. That no significant crude oil or production oil wastes, other than that allowed under Condition No. 52, shall be left exposed to the atmosphere.

PUBLIC WORKS AGENCY CONDITIONS:

56. That an alternate access shall be provided to the well sites and shall be subject to approval of the Public Works Agency. The plans for the construction of the new road shall be filed with the Public Works Agency by November 22, 1978. Construction of the new road shall be completed within ninety (90) days after approval of the plans by the Public Works Agency and such road shall serve

CONDITIONS FOR: CUP-3543

APPLICANT: Phoenix West Oil & Gas Co

RESOLUTION NO: 77-54

PAGE: 6

413

PUBLIC WORKS AGENCY CONDITIONS: (Con't)

as the only permitted truck access route to and from the subject drill site after that date. No more than two (2) additional oil and gas wells shall be drilled to production prior to installation of the proposed access road. Enforcement of the requirements of this condition shall not be stayed because of the filing or pendency of any request to modify or delete this condition.

57. That a fee based upon actual time spent, as determined by the Public Works Agency, shall be paid to Public Works for said plan(s) review and inspection (as required in Condition No. 56).
58. That prior to any grading operation that involves moving undisturbed earth, the permittee shall engage a qualified archaeologist to perform a general surface reconnaissance on each proposed drilling site. Following said reconnaissance, the archaeologists may make recommendations as to disposition, preservation, mitigation or salvage of any site find to the Planning Director, who is authorized to enforce said recommendations as conditions of this permit.

FIRE DEPARTMENT CONDITIONS

59. That provisions for fire suppression shall be in accordance with the Ventura County Fire Protection District Ordinance No. 9 and approved by the Ventura County Fire Chief.
60. That a Uniform Fire Code Permit is required.
61. That water for fire protection shall be required during drilling operations. A 20,000 gallon (500 barrel Baker tank) tank filled with water and maintained full, with a grated shut-off equipped with a 4 inch National Standard Threaded male outlet near the bottom of the tank, which will allow the fire department to draw out all the water in the event of a fire, shall be required. Location of the tank shall be subject to approval of the local Engine Company.
62. That the installation of any oil holding tanks shall be in accordance with N.F.P.A. #30.
63. That any brush surrounding the drill site shall be cleared in accordance with the Uniform Fire Code and the U.S. Forest Service requirements, if applicable.

DS:d1/432

ERA MEMO:
Legibility of writing, typing or
printing UNSATISFACTORY
in portions of the documents
when received.

ENVIRONMENTAL RESOURCE AGENCY
county of ventura

Building & Planning Services

Victor R. Husbands
Director

September 25, 1978

Mr. Ted Off, Receiver
Phoenix West Oil and Gas
Corporation
536 East Thompson Boulevard
Ventura, California 93001

Dear Mr. Off:

Subject: Minor Change for CUP-3543

This letter grants a minor change to Conditional Use Permit No. CUP-3543 (Agnew Drill Site) to establish and extend deadlines for compliance with Condition Nos. 25, 39, 49 and 52 respectively relating to: landscaping, removal of temporary tanks, elimination of venting and installation of permanent tanks.

Based upon your initial request for a time extension to October 2, 1978 and your subsequent telephone conversations and letter of September 19, 1978, the date by which the above conditions must be complied with is October 30, 1978. The condition compliance deadline was extended to this date in recognition of the difficulties you have had in getting contractors to meet earlier deadlines because of material shortages and labor problems. The above referenced conditions revised pursuant to this minor change now read as follows:

Condition No. 25. "That by October 30, 1978 a landscaping plan shall be submitted and approved by the Planning Director and installed with provisions for on-going maintenance."

Condition No. 39. "That all temporary oil tanks shall be removed from the subject permit area by October 30, 1978."

Condition No. 49. "No venting to the atmosphere of well head gas shall occur after October 30, 1978. If a gas line or other method of transporting the gas is not available, the gas shall be flared in a manner acceptable to the APCD and the Planning Director."

Condition No. 52. "Installation of permanent oil tanks at the site shall be completed by October 30, 1978."

MAIN OFFICE
800 South Victoria, Ventura, CA 93009

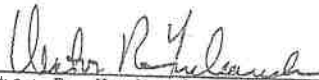
BRANCH OFFICES
Camarillo: District 3, 2400 Ventura Boulevard, Camarillo, CA 93010 (805) 482-8841
Simi Valley: District 2, 3200 Cochran Street, Simi, CA 93065 (805) 522-3012

Mr. Ted Off
September 25, 1978
Page Two

If you have any questions, please contact Todd Collart at
654-2496.

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY



Victor R. Husbands, Director
Building and Planning Services

VRH:sl

cc: Bill Peck

APPENDIX E
CUMULATIVE AIR QUALITY CALCULATIONS
"HIGH FIND" PRODUCTION RATES

APPENDIX E

CUMULATIVE AIR QUALITY CALCULATIONS "HIGH FIND" OIL PRODUCTION RATES

General

Utilizing existing emission inventories, the cumulative impacts on air quality in the Ojai Valley and Santa Paula airshed (RSA2) from the production phases of the proposed, pending, and probable projects were calculated. The figures for "high find" production estimates were used. The impacts of site preparation, the drilling phase, and abandonment phase on the RSA 2 air shed were not calculated because these are "single time" events occurring only once in the development of each site/well, while the production phase is considered a "long term" event.

Experience with oil well production shows that a specific well's production decreases each year of its life. This decline in the quantity pumped from a well may decrease 20% to 50% from the previous year's production. This decline in crude oil production will cause a decrease in the amount of traffic related emissions and throughput related emissions since maintenance and storage of the crude oil will also diminish. This was discussed and estimated when the calculations for the cumulative impacts were developed herewith.

Base Data

The base data used is from the 1977 Emissions Inventory from the AQMP. It is again summarized in Table E-1 of this appendix and includes a breakdown of the RSA 2 air shed emission contribution.

The existing oil production characteristics for the Upper Ojai planning area, from the Department of Oil and Gas (DOG) 1977 Annual Report, were as follows,

- 145 producing wells
- 1,115,237 bbl. production
- 21 bbl. ave. daily production per well.

This description of producing wells and oil production, including DOG's description of existing refining and marketing facilities was used in the development of the RSA 2 Emissions Inventory for 1977.

The DOG's 1978 Annual Report and subsequent updates show that 195 producing wells are now in the Upper Ojai area (50 more wells than reported in 1977). Assuming that the average production rate of 21 bbl./well/day remains constant, the emissions from these 50 additional wells put into production since the 1977 inventory would be,

- 50 additional producing wells
- 1050 bbl. production/day.

Approved Oil Permits

Data provided by the VCERA on "Approved Oil Permits" indicates a total of,

- 6 approved sites
- 31 approved wells.

The permittee states that the actual number of sites and wells that probably will be developed is,

- 4 sites
- 4 to 27 wells.

Assumptions were made to develop a "high find" production scenario for the approved oil permits. A "high find" production rate of 150 bbls/well/day for CUP-3344 and 40 bbls/well/day for CUP-3653 with a 20% annual decline in the rate were assumed. The number of sites assumed to be actually developed was 4 sites with 26 wells. The time frame was assumed to be 2 years, with one-half of the wells producing within the

first year and the remainder within the second year. With these assumptions in mind, Table E-2 was developed.

Pending Oil Permits

The pending oil permits are those for CUP-3869 (Phoenix West), CUP-3680 and CUP-3681 (Union Oil), CUP-3688 (ARGO). A scenario of these pending projects is as follows:

- 9 new sites
- 27 new wells
- 2 to 5 year time frame
- High Find Production Rates - First Year of Production
 - 300¹/bbl./day/well
 - 250¹/bbl./day/well
 - 150²/bbl./day/well

Note: Decrease in production rate each year as follows,

¹/declines 50% after 1st year, 35% after 2nd year, and 20% thereafter.

²/declines 20% after each year.

By assuming half of the wells would be producing within the first year and the remaining wells producing within the second year, the "high find" production for the pending permits would be as shown in Table E-3.

Probable Oil Operations

The probable oil operations are described in Section 2.5 of this report. A precis of the "high find" scenario of these probable projects is as follows,

- 25 new sites plus 4 existing sites
- 46 new wells
- 1 to 5 year time frame
- High Find Production Rates - First Year of Production
 - 200 to 300¹/bbl./day/well
 - 100 to 150²/bbl./day/well
 - 35³/bbl./day/well

Note: decrease in production rate each year as follows,

¹/declines 50% after 1st year, 35% after 2nd year, and 20% thereafter

²/declines 20% after each year

³/Declines 10% after each year

For those developments with 2 year time frames, it was assumed half the wells would be producing within the first year and the remaining wells producing within the second year. The resulting "high find" production for the pending permits would be as shown in Table E-4.

Cumulative Emissions for Production Phase

The cumulative emissions were prepared based on all the existing, pending, proposed, and probable oil production projects that have been identified subsequent to the base datum (Ventura County 1977 Emissions Inventory). The cumulative emissions resulting from site preparations, drilling phases, abandonment phases, and motor vehicle emissions associated with oil production projects were not included because of their "single time" event nature. The emissions from the production phase are considered "long term." Summary from the previous portions of this Appendix section is as shown on Table E-5.

Table E-6 shows the emission factors used to develop the cumulative emissions for the production phase, not including motor vehicle emissions associated with the oil production.

Using the figures from Table E-5 and Table E-6, the cumulative emissions were calculated and are shown in Table E-7 for 1st, 2nd, 3rd, and 4th year production emissions.

Table E-8 shows the emission allocations for the Ojai Non-growth Area and the total cumulative emissions (high find basis) developed and shown in Table E-7. Table E-8 illustrates the cumulative impact of all the oil production developments planned for this area.

TABLE E-1

(PARTIAL) EMISSIONS INVENTORY FOR VENTURA COUNTY 1977^{1/3/}
(TONS PER YEAR)

<u>Emission Source Category</u>	<u>RHC</u>	<u>NOx</u>	<u>SOx</u>	<u>TSP</u>	<u>CO</u>
1. Petroleum					
A. Production	2,007	6	-	-	1
B. Refining	71	45	5	9	16
C. Marketing	1,486	-	-	-	-
D. Petroleum Combustion	335	6,912	15	61	1,179
Subtotal Petroleum	3,899	6,963	20	70	1,196
(% of total emissions)	(13.4%)	(23.2%)	(0.1%)	(0.5%)	(0.8%)
Total, all sources Ventura County	29,045	29,957	19,979	15,261	155,623

RSA 2					
<u>Emission Source Category</u> ^{2/}					
Portion of Total					
Emissions Inventory					
<u>For Ventura County 1977</u>	<u>RHC</u>	<u>NOx</u>	<u>SOx</u>	<u>TSP</u>	<u>CO</u>
1. Petroleum					
A. Production	1,252	-	-	-	-
B. Refining	23	-	3	-	-
C. Marketing	1,103	-	-	-	-
D. Petroleum Combustion	263	6,407	2	33	971
Subtotal Petroleum					
Emissions RSA 2	2,641	6,407	5	33	971
(% of RSA 2 total emissions)	(28.0%)	(60.8%)	(0.1%)	(15.1%)	(2.0%)
(% of total County emissions)	(9.1%)	(21.4%)	(0.0%)	(0.2%)	(0.6%)
Total, all sources RSA 2	9,425	10,546	4,206	218	49,654

NOTE^{1/}From "AQMP", VCERA, Table for "Emissions Inventory for Ventura County - 1977"^{2/}Breakdown of RSA 2 air shed emission contribution from VCERA, Air Pollution Control District staff.^{3/}Emissions from auto/truck and heavy truck traffic related to petroleum activities are included in "Motor Vehicles" Emission Category.

TABLE E-2

CUMULATIVE HIGH FIND PRODUCTION
DEVELOPMENT FOR APPROVED PROJECTS

<u>Year</u>	<u>Description</u>
1st year:	-2 new sites -4 new wells -490 bbl. new production/day for first year
2nd year:	-2 new sites + 2 existing sites -6 new wells + 4 2nd year production wells -1292 bbl./production/day for second year
3rd year and succeeding years	-4 existing sites -10 production wells -1034 bbl. production/day for third year with a 20% decrease in oil production each year thereafter

TABLE E-3

CUMULATIVE HIGH FIND PRODUCTION
DEVELOPMENT FOR PENDING PERMITS

<u>Year</u>	<u>Description</u>
1st year:	-5 new sites -14 new wells -3250 bbl. new production/day for first year
2nd year:	-4 new sites plus 5 existing sites -13 new wells plus 14 2nd year production wells -4710 bbl. production/day for second year
3rd year:	-9 existing sites -13 2nd year production wells plus 14 3rd year production wells -2808 bbl. production/day for third year
4th year and succeeding years	-9 existing sites -27 production wells -2058 bbl. production/day for fourth year with a 20% decrease in oil production each year thereafter

TABLE E-4

CUMULATIVE HIGH FIND PRODUCTION
DEVELOPMENT FOR PROBABLE OIL OPERATIONS

<u>Year</u>	<u>Description</u>
1st year:	-15 new sites plus 3 existing sites -23 new wells -3275 bbl. production/day for first year
2nd year:	-10 new sites +19 existing sites -23 new wells +23 2nd year production wells -5523 bbl. production/day for second year
3rd year:	-29 existing sites -23 2nd year production wells plus 23 3rd year production wells -3877 bbl. production/day for 3rd year
4th year and succeeding years	-29 existing sites -46 production wells -3002 bbl. production/day for 4th year with a 20% decrease (approx.) in oil production each year thereafter

TABLE E-5

SUMMARY OF CUMULATIVE HIGH FIND
PRODUCTION FOR EXISTING, APPROVED,
PENDING, AND PROBABLE OIL PRODUCTION PROJECTS

Year	Development Identification	Description		Production bbl./day
		Sites	Wells	
1st year:	Existing	unknown	50	1,050
	Approved	2	4	490
	Pending	5	14	3,250
	Probable	<u>18</u>	<u>23</u>	<u>3,275</u>
	Total	25	91	8,065
2nd year:	Existing	unknown	50	1,050
	Approved	4	10	1,292
	Pending	9	27	4,710
	Probable	<u>29</u>	<u>46</u>	<u>5,523</u>
	Total	42	133	12,575
3rd year:	Existing	unknown	50	1,050
	Approved	4	10	1,034
	Pending	9	27	2,808
	Probable	<u>29</u>	<u>46</u>	<u>3,877</u>
	Total	42	133	8,769
4th year:	Existing	unknown	50	1,050
	Approved	4	10	827
	Pending	9	27	2,058
	Probable	<u>29</u>	<u>46</u>	<u>3,002</u>
	Total	42	133	6,937
5th year and years thereafter	The number of sites and wells will remain the same, but oil production will decrease by approximately 20% (from the previous year's rate) each year.			

TABLE E-6

CUMULATIVE AIR QUALITY EMISSION
FACTORS USED FOR PRODUCTION PHASE

Fugitive well head emissions (per well), VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\begin{aligned}\text{THC: } & 2.05 \text{ lbs/well/day (Rod well pump)} \div 2000 = 10.25 \times 10^{-4} \text{ TPD/well} \\ \text{RHC: } & 77.6\% \text{ THC} = 77.6\% \times (10.25 \times 10^{-4}) = 7.95 \times 10^{-4} \text{ TPD/well} \\ \text{THC: } & 0.3 \text{ lbs/day (gas trap)} \times 4 \frac{\text{gas traps}}{\text{site}} \div 2000 = 6.00 \times 10^{-4} \text{ TPD/well} \\ \text{RHC: } & 20.2\% \text{ THC} = 20.2\% \times 0.0006 = 1.21 \times 10^{-4} \text{ TPD/site}\end{aligned}$$

Emissions from onsite storage tanks for throughput working losses. Emission factor from VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\begin{aligned}\text{THC: } & \frac{\text{gpd}}{1000 \text{ gal through-put}} \times 2.8 \text{ lbs.} \times \frac{1}{2000} = 1.40 \times 10^{-6} \text{ TPD} \times \text{gpd} \\ & \text{for working losses} \\ \text{RHC: } & 88.1\% \text{ THC} = 88.1\% \times (1.4 \times 10^{-6}) = 1.23 \times 10^{-6} \text{ TPD} \times \text{gpd}\end{aligned}$$

Emissions from onsite fixed roof storage tanks for breathing losses. Based on two 1000-bbl. tanks, 20 feet diameter, 18 feet height, 70°F ambient temp. and ΔT of 20°F, and paint factor of 1.18 with emission factors from VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\text{THC: } \frac{1.66 \text{ lbs/year}}{1000 \text{ gals. storage}} \times 2 \times 1000 \text{ bbls.} \times 42 \text{ gal/bbl} \div 2000 \text{ lbs/ton} \div 365 \text{ da/yr} = 1.91 \times 10^{-4} \text{ TPD/site}$$

$$\text{RHC: } 88.1\% \text{ THC} = 88.1\% \times (1.91 \times 10^{-4}) = 1.68 \times 10^{-4} \text{ TPD/site}$$

Emissions from petroleum loading racks (emissions equal 7 lbs/1000 gallons transferred) from VCAPCD, Emissions Inventory, October, 1977.

$$\begin{aligned}\text{THC: } & \frac{\text{gpd}}{1000 \text{ gal transferred}} \times 7 \text{ lbs} \times \frac{1}{2000} = 3.50 \times 10^{-6} \text{ TPD} \times \text{gpd} \\ \text{RHC: } & 86.2\% \text{ THC} = 86.2\% \times (3.5 \times 10^{-6}) = 3.02 \times 10^{-6} \text{ TPD} \times \text{gpd}\end{aligned}$$

Emissions from natural gas fired production unit equipment per well head (40 hp each production unit/well, 24 hours/day operation, with 95 percent load factor). Emissions factors from VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\text{THC: } \frac{1000}{10^6 \text{ c.f.}} \times 0.95 \times 40 \text{ hp} \times 24 \text{ hrs/da} \times 10,000 \text{ Btu/hp-hr} \div 1050 \text{ Btu/CF} \div 2000 \text{ lbs/ton} = 0.00434 \text{ TPD/well}$$

$$\begin{aligned}\text{RHC: } & 9.5\% \text{ THC} = 9.5\% \times 0.00434 = 0.00041 \text{ TPD/well} \\ \text{NOx: } & 2500 \times 0.95 \div 10^6 \times 40 \times 24 \times \text{conv. factor} = 0.01086 \text{ TPD/well} \\ \text{CO: } & 320 \times 0.95 \div 10^6 \times 40 \times 24 \times \text{conv. factor} = 0.00139 \text{ TPD/well} \\ \text{PM: } & 10 \times 0.95 \div 10^6 \times 40 \times 24 \times \text{conv. factor} = 0.00004 \text{ TPD/well} \\ \text{SOx: } & 0.6 \times 0.95 \div 10^6 \times 40 \times 24 \times \text{conv. factor} = 2.61 \times 10^{-6} \text{ TPD/well}\end{aligned}$$

Fugitive emissions from natural gas fired production unit equipment per well head. Emissions factor from VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\text{THC: } 4.1 \text{ lbs/engine/day} \div 2000 \text{ lbs/ton} \div 1 \text{ engine/well} = 0.00205 \text{ TPD/well}$$

$$\text{RHC: } 20.2\% \text{ THC} = 20.2\% \times 0.00205 = 0.04141 \text{ TPD/well}$$

Emissions from gas-fired heater treater (5 MM Btu/hr output and one heater treater per production site). Analysis considers 95 percent frequency of operation per day. Emissions factors from VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\text{THC: } \frac{114 \text{ mm Btu/day}}{1050 \text{ Btu/cu ft of gas}} \times \frac{3.0 \text{ lbs THC}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 0.0002 \text{ TPD/site}$$

$$\text{RHC: } 40.0\% \text{ THC} = 40.0\% \times 0.0002 = 0.00008 \text{ TPD/site}$$

$$\text{CO: } 108571.42 \times \frac{17 \text{ lbs CO}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 0.0009 \text{ TPD/site}$$

$$\text{NOx: } 108571.42 \times \frac{120 \text{ lbs NOx}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 0.0068 \text{ TPD/site}$$

$$\text{PM: } 108571.42 \times \frac{10 \text{ lbs PM}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 0.0005 \text{ TPD/site}$$

$$\text{SOx: } 108571.42 \times \frac{0.6 \text{ lbs SOx}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 3.26 \times 10^{-5} \text{ TPD/site}$$

TABLE E-7

TOTAL CUMULATIVE EMISSIONS FOR HIGH FIND
PRODUCTION FOR EXISTING, APPROVED, PENDING,
AND PROBABLE OIL PRODUCTION PROJECTS
(Tons)

Year	Emission Source	THC	RHC	NOx	SOx	PM	CO
1st Year:	- Fugitive well head emissions						
	- rod well pump	34.0	26.4	--	--	--	--
	- gas trap	5.5	1.1	--	--	--	--
	- Onsite storage tanks						
	- working	173.1	152.4	--	--	--	--
	- breathing	1.7	1.5	--	--	--	--
	- Loading racks	432.8	373.1	--	--	--	--
	- Gas-fired	(144.1 tons Exempt)	(13.7 tons Exempt)	(360.7 tons Exempt)	(0.1 tons Exempt)	(1.3 tons Exempt)	(46.2 tons Exempt)
	- production equipment	(68.1 tons Exempt)	(13.7 tons Exempt)	--	--	--	--
	- fugitive engine emiss.						
	- Gas-fired heater treater	1.8	0.7	62.1	0.3	4.6	8.2
	TOTAL EMISSIONS 1st Year 4/						
	- Uncontrolled:	648.9	555.2	62.1	0.3	4.6	8.2
	- With BACT :	102.0	80.9	18.6	0.3	4.6	8.2

- NOTES: 1. 10 lbs. per hour = 0.1200 tons per day = 43.8 tons per year (365 days per year).
 2. Emissions from pumping production equipment exempt from VCAPCD Rule 26 and AOMP allocation analysis.
 3. Emissions with BACT were calculated using assumptions shown on Page E-14.

TABLE E-7

TOTAL CUMULATIVE EMISSIONS FOR HIGH FIND
PRODUCTION FOR EXISTING, APPROVED, PENDING,
AND PROBABLE OIL PRODUCTION PROJECTS
(Tons)

Year	Emission Source	THC	RHC	NOx	SOx	PM	CO
2nd Year:	- Fugitive well head emissions						
	- rod well pump	49.7	38.6	--	--	--	--
	- gas trap	9.2	1.9	--	--	--	--
	- Onsite storage tanks						
	- working	269.9	237.7	--	--	--	--
	- breathing	2.9	2.6	--	--	--	--
	- Loading racks	674.8	581.7	--	--	--	--
	- Gas-fired pumping	(210.7 tons)	(20.0 tons)	(527.2 tons)	(0.1 tons)	(1.9 tons)	(67.5 tons)
	- production equip.	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
	- fugitive emissions	(99.5 tons)	(20.0 tons)	--	--	--	--
		Exempt	Exempt				
	- Gas-fired heater treater	3.1	1.2	104.2	1.7	7.7	13.8
TOTAL EMISSIONS							
2nd Year							
	- Uncontrolled:	1009.3	863.7	104.2	1.7	7.7	13.8
	- With BACT :	156.4	123.9	31.3	1.7	7.7	13.8

- NOTES: 1. 10 lbs. per hour = 0.1200 tons per day = 43.8 tons per year (365 days per year).
2. Emissions from pumping production equipment exempt from VCAPCD Rule 26 and AQMP allocation analysis.
3. Emissions with BACT were calculated using assumptions shown on Page E-14.

TABLE E-7

TOTAL CUMULATIVE EMISSIONS FOR HIGH FIND
PRODUCTION FOR EXISTING, APPROVED, PENDING,
AND PROBABLE OIL PRODUCTION PROJECTS
(Tons)

Year	Emission Source	THC	RHC	NOx	SOx	PM	CO
3rd Year:	- Fugitive well head emissions						
	- rod well pump	49.7	38.6	--	--	--	--
	- gas trap	9.2	1.9	--	--	--	--
	- Onsite storage tanks						
	- working	188.3	165.8	--	--	--	--
	- breathing	2.9	2.6	--	--	--	--
	- Loading racks	470.5	405.6	--	--	--	--
	- Gas-fired pumping	(210.7 tons)	(20.0 tons)	(527.2 tons)	(0.1 tons)	(1.9 tons)	(67.5 tons)
	- production equip.	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
	- fugitive emissions	(99.5 tons)	(20.0 tons)	--	--	--	--
		Exempt	Exempt				
	- Gas-fired heater treater	3.1	1.2	104.2	1.7	7.7	13.8
TOTAL EMISSIONS 3rd Year							
	- Uncontrolled:	723.7	615.7	104.2	1.7	7.7	13.8
	- With BACT :	128.1	99.1	31.3	1.7	7.7	13.8

- NOTES: 1. 10 lbs per hour = 0.1200 tons per day = 43.8 tons per year (365 days per year).
 2. Emissions from pumping production equipment exempt from VCAPCD Rule 26 and AQMP allocation analysis.
 3. Emissions with BACT were calculated using assumptions shown on Page E-14.

TABLE E-7

TOTAL CUMULATIVE EMISSIONS FOR HIGH FIND
PRODUCTION FOR EXISTING, APPROVED, PENDING,
AND PROBABLE OIL PRODUCTION PROJECTS
(Tons)

Year	Emission Source	THC	RHC	NOx	SOx	PM	CO
4th Year:	- Fugitive well head emissions						
	- rod well pump	49.7	38.6	---	---	---	---
	- gas trap	9.2	1.9	---	---	---	---
	- Onsite storage tanks						
	- working	148.9	131.1	---	---	---	---
	- breathing	2.9	2.6	---	---	---	---
	- Loading racks	372.2	320.8	---	---	---	---
	- Gas-fired pumping	(210.7 tons)	(20.0 tons)	(527.2 tons)	(0.1 tons)	(1.9 tons)	(67.5 tons)
	- production units	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
	- fugitive emiss.	(99.5 tons)	(20.0 tons)	---	---	---	---
		Exempt	Exempt				
	- Gas-fired heater treater	3.1	1.2	104.2	1.7	7.7	13.8
TOTAL EMISSIONS 4th Year							
	- Uncontrolled:	586.0	496.2	104.2	1.7	7.7	13.8
	- With BACT :	114.4	87.1	31.3	1.7	7.7	13.8

NOTES: 1. 10 lbs. per hour = 0.1200 tons per day = 43.8 tons per year (365 days per year).

2. Emissions from pumping production equipment exempt from VCAPCD Rule 26 and AQMP allocation analysis.

TABLE E-8

SUMMARY AND COMPARISON OF OJAI NON-GROWTH
 AREA EMISSION ALLOCATIONS VS
 TOTAL CUMULATIVE EMISSIONS (HIGH FIND)
 FOR NONATTAINMENT POLLUTANTS

STATIONARY SOURCE EMISSION ALLOCATIONS					Tons Per 1/ Year (TPY)
	Emission	1979	1980	1981	1982
<u>AQMP Allocations</u>					
	-RHC	19.0	20.0	172.0	235.0
	-NOx	23.0	25.0	305.0	495.0
 Cumulative High Find Scenario for Ojai Non-Growth Area- Oil Production Only					
...Assuming 1st year of Production 1980	<u>RHC</u>				
	- uncontrolled	--	555.2	863.7	615.7
	- with BACT	--	80.9	123.9	99.1
	<u>NOx</u>				
	- uncontrolled	--	62.1	104.2	104.2
	- with BACT	--	18.6	31.3	31.3
...Assuming 1st year of Production 1981	<u>RHC</u>				
	- uncontrolled	--	--	555.2	863.7
	- with BACT	--	--	80.9	123.9
	<u>NOx</u>				
	- uncontrolled	--	--	62.1	104.2
	- with BACT	--	--	18.6	31.3

NOTES

1. Ojai Non-growth Area Stationary Source Emission Allocations from Ventura County AQMP, Table V-10. Ojai Non-growth Area encompasses the cumulative development area.
2. High Find cumulative emissions from Table E-7, Appendix E.

APPENDIX F
CUMULATIVE AIR QUALITY CALCULATIONS
"MEDIUM FINE" PRODUCTION RATES

APPENDIX F

CUMULATIVE AIR QUALITY CALCULATIONS

"MEDIUM FIND" OIL PRODUCTION RATES

General

Utilizing existing emission inventories, the cumulative impacts on air quality in the Ojai Valley and Santa Paula airshed (RSA2) from the production phases of the proposed, pending, and probable projects were calculated. The figures for "medium find" production estimates were used. The impacts of site preparation, the drilling phase, and abandonment phase on the RSA 2 air shed were not calculated because these are "single time" events occurring only once in the development of each site/well, while the production phase is considered a "long term" event.

Experience with oil well production shows that a specific well's production decreases each year of its life. This decline in the quantity pumped from a well may decrease 20% to 50% from the previous year's production. This decline in crude oil production will cause a decrease in the amount of traffic related emissions and throughput related emissions since maintenance and storage of the crude oil will also diminish. This was discussed and estimated when the calculations for the cumulative impacts were developed herewith.

Base Data

The base data used is from the 1977 Emissions Inventory from the AQMP. It is again summarized in Table E-1 of this appendix and includes a breakdown of the RSA 2 air shed emission contribution.

The existing oil production characteristics for the Upper Ojai planning area, from the Department of Oil and Gas (DOG) 1977 Annual Report, were as follows,

- 145 producing wells
- 1,115,237 bbl. production
- 21 bbl. ave. daily production per well.

This description of producing wells and oil production, including DOG's description of existing refining and marketing facilities was used in the development of the RSA 2 Emissions Inventory for 1977.

The DOG's 1978 Annual Report and subsequent updates show that 195 producing wells are now in the Upper Ojai area (50 more wells than reported in 1977). Assuming that the average production rate of 21 bbl./well/day remains constant, the emissions from these 50 additional wells put into production since the 1977 inventory would be,

- 50 additional producing wells
- 1050 bbl. production/day.

Approved Oil Permits

Data provided by the VCERA on "Approved Oil Permits" indicates a total of,

- 6 approved sites
- 31 approved wells.

The permittee states that the actual number of sites and wells that probably will be developed is,

- 3 sites
- 6 wells.

Assumptions were made to develop a "medium find" production scenario for the approved oil permits. A "medium find" production rate of 21 bbl./well/day with a 20% annual decline in the rate was assumed. The number of sites assumed to be actually developed was 3 sites with 6 wells. The time frame was assumed to be 2 years, with one-half of the wells producing within the

first year and the remainder within the second year. With these assumptions in mind, Table F-2 was developed.

Pending Oil Permits

The pending oil permits are those for CUP-3869 (Phoenix West), CUP-3680 and CUP-3681 (Union Oil), CUP-3688 (ARGO). An estimate of the medium find scenario of these pending projects is as follows:

- 7 new sites
- 15 new wells
- 2 to 5 year time frame
- Medium Find Production Rates - First Year of Production
 - 100^{1/} bbl./day/well (Phoenix West CUP-3869)
 - 100^{2/} bbl./day/well (others)
 - 21^{2/} bbl./day/well

Note: Decrease in production rate each year as follows,

- ^{1/} declines 50% after 1st year,
and 20% thereafter.
- ^{2/} declines 20% after each year.

By assuming half of the wells would be producing within the first year and the remaining wells producing within the second year, the "medium find" production for the pending permits would be as shown in Table F-3.

Probable Oil Operations

The probable oil operations are described in Section 2.5 of this report. A precis of the "medium find" scenario of these probable projects is as follows:

- 22 new sites plus 4 existing sites
- 28 new wells
- 1 to 5 year time frame
- Medium Find Production Rates - First Year of Production
 - 50 to 100 bbl./day/well
 - 15 to 35 bbl./day/well

Note: decrease in production rate each year as follows,

- ^{1/} declines 20% after each year
- ^{2/} declines 10% after each year

For those developments with 2 year time frames, it was assumed half the wells would be producing within the first year and the remaining wells producing within the second year. The resulting "high find" production for the pending permits would be as shown in Table F-4.

Cumulative Emissions for Production Phase (Medium Find)

The cumulative emissions were prepared based on all the existing, pending, proposed, and probable oil production projects that have been identified subsequent to the base datum (Ventura County 1977 Emissions Inventory). The cumulative emissions resulting from site preparations, drilling phases, abandonment phases, and motor vehicle emissions associated with oil production site monitoring were not included because of their "single time" event nature. The emissions from the production phase are considered "long term." Summary from the previous portions of this Appendix section is as shown on Table F-5.

If a "high find" production rate occurs, pipelines would be used for petroleum transport. If a "medium find" production rate occurs, it is probable that the petroleum would be transported out by tank trucks. Given the known volume of a standard tank truck (180 bbl/truck), a total tank truck ADT can be determined.

Table F-6 shows the emission factors used to develop the cumulative emissions for the production phase, not including motor vehicle emissions associated with the oil production.

Using the figures from Table F-5 and Table F-6, the cumulative emissions were calculated and are shown in Table F-7 for 1st, 2nd, 3rd, and 4th year production emissions.

Table F-8 shows the emission allocations for the Ojai Non-growth Area and the total cumulative emissions (medium find basis) developed and shown in Table F-7. Table F-8 illustrates the cumulative impact of all the oil production developments planned for this area.

If oil well production is assumed to begin in 1981, 1981 and 1982 RHC and NOx are both less than the allocations using BACT.

In 1979 and 1980, because of low emission allocations, and depending on the actual rate of oil well development in the area, BACT would be required to limit NOx and RHC emissions. Even with BACT, the RHC allocation may be reached, requiring applicants to postpone development or use emission banking or other forms of emissions trade off.

In 1981 and 1982, emission allocations are high enough so that BACT, for RHC and NOx, would limit emissions below the allocation levels.

TABLE F-1

(PARTIAL) EMISSIONS INVENTORY FOR VENTURA COUNTY 1977^{1/3/}
(TONS PER YEAR)

Emission Source Category	RHC	NOx	SOx	TSP	CO
1. Petroleum					
A. Production	2,007	6	-	-	1
B. Refining	71	45	5	9	16
C. Marketing	1,486	-	-	-	-
D. Petroleum Combustion	335	6,912	15	61	1,179
Subtotal Petroleum	3,899	6,963	20	70	1,196
(% of total emissions)	(13.4%)	(23.2%)	(0.1%)	(0.5%)	(0.8%)
Total, all sources Ventura County	29,045	29,957	19,979	15,261	155,623

RSA 2					
Emission Source Category ^{2/}					
Portion of Total Emissions Inventory For Ventura County 1977					
	RHC	NOx	SOx	TSP	CO
1. Petroleum					
A. Production	1,252	-	-	-	-
B. Refining	23	-	3	-	-
C. Marketing	1,103	-	-	-	-
D. Petroleum Combustion	263	6,407	2	33	971
Subtotal Petroleum					
Emissions RSA 2	2,641	6,407	5	33	971
(% of RSA 2 total emissions)	(28.0%)	(60.8%)	(0.1%)	(15.1%)	(2.0%)
(% of total County emissions)	(9.1%)	(21.4%)	(0.0%)	(0.2%)	(0.6%)
Total, all sources RSA 2	9,425	10,546	4,206	218	49,654

NOTE^{1/}From "AQMP", VCERA, Table for "Emissions Inventory for Ventura County - 1977"^{2/}Breakdown of RSA 2 air shed emission contribution from VCERA, Air Pollution Control District staff.^{3/}Emissions from auto/truck and heavy truck traffic related to petroleum activities are included in "Motor Vehicles" Emission Category.

TABLE F-2

CUMULATIVE MEDIUM FIND PRODUCTION
DEVELOPMENT FOR APPROVED PROJECTS

<u>Year</u>	<u>Description</u>
1st year:	-2 new sites -3 new wells -63 bbl. new production/day for first year
2nd year:	-1 new site + 2 existing sites -3 new wells + 3 2nd year production wells -113 bbl./production/day for second year
3rd year and succeeding years	-3 existing sites -6 production wells -91 bbl. production/day for third year with a 20% decrease in oil production each year thereafter

TABLE F-3

CUMULATIVE MEDIUM FIND PRODUCTION
DEVELOPMENT FOR PENDING PERMITS

<u>Year</u>	<u>Description</u>
1st year:	-4 new sites -3 new wells -726 bbl. new production/day for first year
2nd year:	-3 new sites plus 4 existing sites -7 new wells plus 8 2nd year production wells -853 bbl. production/day for second year
3rd year:	-7 existing sites -7 2nd year production wells plus 8 3rd year production wells -533 bbl. production/day for third year
4th year and succeeding years	-7 existing sites -15 production wells -426 bbl. production/day for fourth year with a 20% decrease in oil production each year thereafter

TABLE F-4

CUMULATIVE MEDIUM FIND PRODUCTION
DEVELOPMENT FOR PROBABLE OIL OPERATIONS

<u>Year</u>	<u>Description</u>
1st year:	-12 new sites plus 3 existing sites -16 new wells -1026 bbl. production/day for first year
2nd year:	-6 new sites + 16 existing sites -12 new wells + 16 2nd year production wells -1681 bbl. production/day for second year
3rd year:	-22 existing sites -12 2nd year production wells plus 16 3rd year production wells -1362 bbl. production/day for 3rd year
4th year and succeeding years	-22 existing sites -28 production wells -1104 bbl. production/day for 4th year with a 20% decrease (approx.) in oil production each year thereafter

TABLE F-5

SUMMARY OF CUMULATIVE MEDIUM FIND
PRODUCTION FOR EXISTING, APPROVED,
PENDING, AND PROBABLE OIL PRODUCTION PROJECTS

<u>Year</u>	<u>Development Identification</u>	<u>Description</u>		
		<u>Sites</u>	<u>Wells</u>	<u>Production bbl./day</u>
1st year:	Existing	unknown	50	1,050
	Approved	2	4	63
	Pending	4	8	726
	Probable	<u>18</u>	<u>16</u>	<u>1,026</u>
	Total	21	78	2,865
2nd year:	Existing	unknown	50	1,050
	Approved	3	6	113
	Pending	7	15	853
	Probable	<u>22</u>	<u>28</u>	<u>1,681</u>
	Total	32	99	3,697
3rd year:	Existing	unknown	50	1,050
	Approved	3	6	91
	Pending	7	15	533
	Probable	<u>22</u>	<u>28</u>	<u>1,362</u>
	Total	32	99	3,036
4th year:	Existing	unknown	50	1,050
	Approved	3	6	73
	Pending	7	15	426
	Probable	<u>22</u>	<u>28</u>	<u>1,104</u>
	Total	32	99	2,653
5th year and years thereafter	The number of sites and wells will remain the same, but oil production will decrease by approximately 20% (from the previous year's rate) each year.			

TABLE F-6

CUMULATIVE AIR QUALITY EMISSION
FACTORS USED FOR PRODUCTION PHASE

Fugitive well head emissions (per well), VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\begin{aligned}\text{THC: } & 2.05 \text{ lbs/well/day (Rod well pump)} \div 2000 = 10.25 \times 10^{-4} \text{ TPD/well} \\ \text{RHC: } & 77.6\% \text{ THC} = 77.6\% \times (10.25 \times 10^{-4}) = 7.95 \times 10^{-4} \text{ TPD/well} \\ \text{THC: } & 0.3 \text{ lbs/day (gas trap)} \times 4 \frac{\text{gas traps}}{\text{site}} \div 2000 = 6.00 \times 10^{-4} \text{ TPD/well} \\ \text{RHC: } & 20.2\% \text{ THC} = 20.2\% \times 0.0006 = 1.21 \times 10^{-4} \text{ TPD/site}\end{aligned}$$

Emissions from onsite storage tanks for throughput working losses. Emission factor from VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\begin{aligned}\text{THC: } & \frac{\text{gpd}}{1000 \text{ gal through-put}} \times 2.8 \text{ lbs.} \times \frac{1}{2000} = 1.40 \times 10^{-6} \text{ TPD} \times \text{gpd} \\ & \text{for working losses} \\ \text{RHC: } & 88.1\% \text{ THC} = 88.1\% \times (1.4 \times 10^{-6}) = 1.23 \times 10^{-6} \text{ TPD} \times \text{gpd}\end{aligned}$$

Emissions from onsite fixed roof storage tanks for breathing losses. Based on two 1000-bbl. tanks, 20 feet diameter, 18 feet height, 70°F ambient temp. and ΔT of 20°F, and paint factor of 1.18 with emission factors from VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\begin{aligned}\text{THC: } & \frac{1.66 \text{ lbs/year}}{1000 \text{ gals. storage}} \times 2 \times 1000 \text{ bbls.} \times 42 \text{ gal/bbl} \div 2000 \text{ lbs/ton} \div 365 \text{ da/yr} = 1.91 \times 10^{-4} \text{ TPD/site} \\ \text{RHC: } & 88.1\% \text{ THC} = 88.1\% \times (1.91 \times 10^{-4}) = 1.68 \times 10^{-4} \text{ TPD/site}\end{aligned}$$

Emissions from petroleum loading racks (emissions equal 7 lbs/1000 gallons transferred) from VCAPCD, Emissions Inventory, October, 1977.

$$\begin{aligned}\text{THC: } & \frac{\text{gpd}}{1000 \text{ gal transferred}} \times 7 \text{ lbs} \times \frac{1}{2000} = 3.50 \times 10^{-6} \text{ TPD} \times \text{gpd} \\ \text{RHC: } & 86.2\% \text{ THC} = 86.2\% \times (3.50 \times 10^{-6}) = 3.02 \times 10^{-6} \text{ TPD} \times \text{gpd}\end{aligned}$$

Emissions from natural gas fired production unit equipment per well head (40 hp each production unit/well, 24 hours/day operation, with 95 percent load factor). Emissions factors from VCAPCD, A.P. Emission Factors for Petroleum Producing and Marketing, January, 1979.

$$\text{THC: } \frac{1000}{10^6 \text{ c.f.}} \times 0.95 \times 40 \text{ hp} \times 24 \text{ hrs/da} \times 10,000 \text{ Btu/hp-hr} \div 1050 \text{ Btu/CF} \div 2000 \text{ lbs/ton} = 0.00434 \text{ TPD/well}$$

$$\text{RHC: } 9.5\% \text{ THC} = 9.5\% \times 0.00434 = 0.00041 \text{ TPD/well}$$

$$\begin{aligned}\text{NOx: } & 2500 \times 0.95 \div 10^6 \times 40 \times 24 \times \text{conv. factor} = 0.01086 \text{ TPD/well} \\ \text{CO: } & 320 \times 0.95 \div 10^6 \times 40 \times 24 \times \text{conv. factor} = 0.00139 \text{ TPD/well} \\ \text{PM: } & 10 \times 0.95 \div 10^6 \times 40 \times 24 \times \text{conv. factor} = 0.00004 \text{ TPD/well} \\ \text{SOx: } & 0.6 \times 0.95 \div 10^6 \times 40 \times 24 \times \text{conv. factor} = 2.61 \times 10^{-6} \text{ TPD}\end{aligned}$$

Fugitive emissions from natural gas fired production unit equipment per well head. Emissions factor from VCAPCD, A.P. Emissions Factors for Petroleum Producing and Marketing, January, 1979.

$$\text{THC: } 4.1 \text{ lbs/engine/day} \div 2000 \text{ lbs/ton} \div 1 \text{ engine/well} = 0.00205 \text{ TPD/well}$$

$$\text{RHC: } 20.2\% \text{ THC} = 20.2\% \times 0.00205 = 0.00041 \text{ TPD/well}$$

Emissions from gas-fired heater treater (5 MM Btu/hr output and one heater treater per production site). Analysis considers 95 percent frequency of operation per day. Emissions factors from VCAPCD, A.P. Emissions Factors for Petroleum Producing and Marketing, January, 1979.

$$\text{THC: } \frac{114 \text{ mm Btu/day}}{1050 \text{ Btu/cu ft of gas}} \times \frac{3.0 \text{ lbs THC}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 0.0002 \text{ TPD/site}$$

$$\text{RHC: } 40.0\% \text{ THC} = 40.0\% \times 0.0002 = 0.00008 \text{ TPD/site}$$

$$\text{CO: } 108571.42 \times \frac{17 \text{ lbs CO}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 0.0009 \text{ TPD/site}$$

$$\text{NOx: } 108571.42 \times \frac{120 \text{ lbs NOx}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 0.0068 \text{ TPD/site}$$

$$\text{PM: } 108571.42 \times \frac{10 \text{ lbs PM}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 0.0005 \text{ TPD/site}$$

$$\text{SOx: } 108571.42 \times \frac{0.6 \text{ lbs SOx}}{1,000,000 \text{ cu ft}} \times \frac{1}{2000} = 3.26 \times 10^{-5} \text{ TPD/site}$$

Emissions from petroleum transport (2 ADT e 30 miles per ADT for every 180 bbls (7560 gals.) of oil transported)

$$\text{THC: } 5.2 \frac{\text{grams}}{\text{mile}} \times \frac{\text{bbls/day}}{180 \text{ bbls}} \times 2 \text{ ADT} \times 30 \text{ miles} \times \frac{(.0022 \text{ lbs/gram})}{(2000 \text{ lbs/ton}) (42 \text{ gals/bbl})} = 4.54 \times 10^{-8} \text{ TPD} \times \text{gpd}$$

$$\text{RHC: } 97.4\% \text{ THC} = 97.4\% \times (4.54 \times 10^{-8}) = 4.42 \times 10^{-8} \text{ TPD} \times \text{gpd}$$

$$\text{CO: } 28.7 \times \frac{\text{bbls/day}}{180 \text{ bbls}} \times 2 \times 30 \times (\text{conv. factor}) = 25.06 \times 10^{-8} \text{ TPD} \times \text{gp}$$

$$\text{NOx: } 20.3 \times \frac{\text{bbls/day}}{180} \times 2 \times 30 \times (\text{conv. factor}) = 17.72 \times 10^{-8} \text{ TPD} \times \text{gp}$$

$$\text{PM: } 1.86 \times \frac{\text{bbls/day}}{180} \times 2 \times 30 \times (\text{conv. factor}) = 1.62 \times 10^{-8} \text{ TPD} \times \text{gpd}$$

$$\text{SOx: } 2.8 \times \frac{\text{bbls/day}}{180} \times 2 \times 30 \times (\text{conv. factor}) = 2.44 \times 10^{-8} \text{ TPD} \times \text{gpd}$$

TABLE F-7

TOTAL CUMULATIVE EMISSIONS FOR MEDIUM FIND
PRODUCTION FOR EXISTING, APPROVED, PENDING,
AND PROBABLE OIL PRODUCTIONS PROJECTS
(Tons)

Year	Emission Source	THC	RHC	NO _x	SO _x	PM	CO
1st Year:	- Petroleum Transport	2.0	1.9	7.8	1.1	0.7	11.0
	- Fugitive well head emissions						
	- rod well pump	29.2	22.6	--	--	--	--
	- gas trap	4.6	0.9	--	--	--	--
	- Onsite storage tanks						
	- working	61.5	54.2	--	--	--	--
	- breathing	1.5	1.3	--	--	--	--
	- Loading racks	153.7	132.5	--	--	--	--
	- Gas-fired pumping	(123.6 tons)	(11.7 tons)	(309.2 tons)	(0.1 tons)	(1.1 tons)	(39.6 tons)
	- production equip.	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
	- fugitive eng. emissions	(58.4 tons)	(11.8 tons)	--	--	--	--
		Exempt	Exempt				
	- Gas-fired heater treater	1.5	0.6	52.1	0.2	3.8	6.9
	TOTAL EMISSIONS						
	1st Year						
	- Uncontrolled	254.0	214.0	59.9	1.3	4.5	17.9
	- With BACT	58.9	44.8	23.4	1.3	4.5	17.9

- NOTES: 1. 10 lbs per hour = 0.1200 tons per day = 43.8 tons per year (365 days per year).
 2. Emissions from pumping production equipment exempt from VCAPCD Rule 26 and AQMP allocation analysis.
 3. Emissions figures for petroleum transport of 2865 bbls/da (120,330 gpd) resulting in an equivalent of 15.9 ADT.

TABLE F-7

TOTAL CUMULATIVE EMISSIONS FOR MEDIUM FIND
PRODUCTION FOR EXISTING, APPROVED, PENDING,
AND PROBABLE OIL PRODUCTION PROJECTS
(Tons)

Year	Emission Source	THC	RHC	NOx	SOx	PM	CO
2nd Year:	- Petroleum Transport	2.6	2.5	10.0	1.4	0.9	14.2
	- Fugitive well head emissions						
	- rod well pump	37.0	28.7	--	--	--	--
	- gas trap	7.0	1.4	--	--	--	--
	- Onsite storage tanks						
	- working	79.3	69.9	--	--	--	--
	- breathing	2.2	2.0	--	--	--	--
	- Loading racks	198.4	171.0	--	--	--	--
	- Gas-fired pumping	(156.8 tons)	(14.9 tons)	(392.4 tons)	(1.8 tons)	(1.4 tons)	(50.2 tons)
	- production equip.	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
	- fugitive eng. emissions	(74.1 tons)	(15.0 tons)	--	--	--	--
		Exempt	Exempt				
	- Gas-fired heater treater	2.3	0.9	79.4	0.4	5.8	10.5
TOTAL EMISSIONS							
2nd Year							
	- Uncontrolled	328.8	276.4	89.4	1.8	6.7	24.7
	- With BACT	76.8	57.8	33.8	1.8	6.7	24.7

- NOTES: 1. 10 lbs. per hour = 0.1200 tons per day = 43.8 tons per year (365 days per year).
2. Emissions from pumping production equipment exempt from VCAPCD Rule 26 and AQMP allocation analysis.
3. Emissions figures for petroleum transport of 3697 bbls/day (155,274 gpd) resulting in an equivalent of 20.5 ADT.

TABLE F-7

TOTAL CUMULATIVE EMISSIONS FOR MEDIUM FIND
PRODUCTION FOR EXISTING, APPROVED, PENDING,
AND PROBABLE OIL PRODUCTION PROJECTS
(Tons)

Year	Emission Source	THC	RHC	NOx	SOx	PM	CO
3rd Year:	- Petroleum Transport	2.1	2.0	8.2	1.1	0.7	11.7
	- Fugitive well head emissions						
	- rod well pump	37.0	28.7	--	--	--	--
	- gas trap	7.0	1.4	--	--	--	--
	- Onsite storage tanks						
	- working	65.2	57.4	--	--	--	--
	- breathing	2.2	2.0	--	--	--	--
	- Loading racks	162.9	140.4	--	--	--	--
	- Gas-fired pumping	(156.8 tons)	(14.9 tons)	(392.4 tons)	(1.8 tons)	(1.4 tons)	(50.2 tons)
	- production equip.	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
	- fugitive eng. emissions	(74.1 tons)	(15.0 tons)	--	--	--	--
		Exempt	Exempt				
	- Gas-fired heater treater	2.3	0.9	79.4	0.4	5.8	10.5
TOTAL EMISSIONS 3rd Year							
	- Uncontrolled	278.7	232.8	87.6	1.5	6.5	22.2
	- With BACT	71.4	53.0	32.0	1.5	6.5	22.2

- NOTES: 1. 10 lbs. per hour = 0.1200 tons per day = 43.8 tons per year (365 days per year).
 2. Emissions from pumping production equipment exempt from VCAPCD Rule 26 and AQMP allocation analysis.
 3. Emissions figures for petroleum transport of 3036 bbls/day (127,512 gpd) resulting in an equivalent of 16.9 ADT.

TABLE F-7

TOTAL CUMULATIVE EMISSIONS FOR MEDIUM FIND
PRODUCTION FOR EXISTING, APPROVED, PENDING,
AND PROBABLE OIL PRODUCTION PROJECTS
(Tons)

Year	Emission Source	THC	RHC	NOx	SOx	PM	CO
4th Year:	- Petroleum Transport	1.8	1.8	7.2	1.0	0.6	10.2
	- Fugitive well head emissions						
	- rod well pump	37.0	28.7	---	---	---	---
	- gas trap	7.0	1.4	---	---	---	---
	- Onsite storage tanks						
	- working	56.9	50.2	---	---	---	---
	- breathing	2.2	2.0	---	---	---	---
	- Loading racks	142.3	122.7	---	---	---	---
	- Gas-fired pumping	(156.8 tons)	(14.9 tons)	(392.4 tons)	(1.8 tons)	(1.4 tons)	(50.2 tons)
	- production equip.	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
	- fugitive eng. emissions	(74.1 tons)	(15.0 tons)	---	---	---	---
		Exempt	Exempt				
	- Gas-fired heater treater	2.3	0.9	79.4	0.4	5.8	10.5
TOTAL EMISSIONS							
4th Year							
	- Uncontrolled	249.5	207.7	86.6	1.4	6.4	20.7
	- With BACT	68.2	50.3	31.0	1.4	6.4	20.7

- NOTES: 1. 10 lbs. per hour = 0.1200 tons per day = 43.8 tons per year (365 days per year).
2. Emissions from pumping production equipment exempt from VCAPCD Rule 26 and AQMP allocation analysis.
3. Emissions figures for petroleum transport of 2653 bbls/day (111,426 gpd) resulting in an equivalent of 14.7 ADT.
4. Emissions with BACT were calculated using assumptions shown on Page F-14.

TABLE F-8

SUMMARY AND COMPARISON OF OJAI NON-GROWTH
AREA EMISSION ALLOCATIONS VS
TOTAL CUMULATIVE EMISSIONS (MEDIUM FIND)
FOR NONATTAINMENT POLLUTANTS

STATIONARY SOURCE EMISSION ALLOCATIONS					Tons Per Year
	<u>Emission</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
<u>AQMP Allocations</u>					
	-RHC	19.0	20.0	172.0	235.0
	-NOx	23.0	25.0	305.0	495.0
Cumulative Medium Find Scenario for Ojai Non-Growth Area- Oil Production Only					
...Assuming 1st year of Production 1980	<u>RHC</u>				
	- uncontrolled	--	214.0	276.4	232.8
	- with BACT	--	44.8	57.8	53.0
	<u>NOx</u>				
	- uncontrolled	--	59.9	89.4	87.6
	- with BACT	--	23.4	33.8	32.0
...Assuming 1st year of Production 1981	<u>RHC</u>				
	- uncontrolled	--	--	214.0	276.4
	- with BACT	--	--	44.8	57.8
	<u>NOx</u>				
	- uncontrolled	--	--	59.9	89.4
	- with BACT	--	--	23.4	33.8

NOTES

1. Ojai Non-growth Area Stationary Source Emission Allocations from Ventura County AQMP, Table V-10. Ojai Non-growth Area encompasses the cumulative development area.
2. Medium Find cumulative emissions from Table F-7, Appendix F.

APPENDIX G
FLORAL AND FAUNAL SPECIES LISTS

Following is a floral and faunal inventory prepared for the original CUP-3543 Draft EIR in September, 1975, by Mr. Bill Lockard and Mr. Bob Foulk of the Ventura County Flood Control District.

According to the information presented in this inventory, no rare or threatened plant or animal species were observed on the project site. There are, however, several species reported or expected within the study area which are considered to be endangered, fully protected, unique, or limited:

<u>Plants</u>	<u>Designation</u>
o white alder (<u>Alnus rhombifolia</u>)	limited

White alder is strictly a riparian species and is restricted to perennial waters. This species occurs in only a few areas in northeastern Ventura County. Relatively vigorous stands of alder are found in upper Sisar Creek.

<u>Mammals</u>	<u>Designation</u>
o mountain lion (<u>Felis concolor</u>)	unique

Mountain lion are expected to occur within the Upper Ojai Valley particularly in the mountainous National Forest lands to the north and east and in the Sulphur Mountain area to the south of the project area. Recent scientific studies by the California Department of Fish and Game indicate that mountain lion populations in the Upper Ojai Valley are presently stable. Currently, it is unlawful to hunt or kill this species. However, permits are issued by the California Department of Fish and Game that allow owners of hunting dogs to pursue mountain lions subject to the conditions of the permit.¹

<u>Birds</u>	<u>Designation</u>
o California condor (<u>Gymnogyps californianus</u>)	endangered
o golden eagle (<u>Aquila chrysaetos</u>)	fully protected
o white-tailed kite (<u>Elanus leucurus</u>)	fully protected
o red-shouldered hawk (<u>Buteo lineatus</u>)	fully protected

The California condor has been designated as an endangered species by the California Department of Fish and Game and the United States Fish and Wildlife Service. Although this species does include the project area within its general range, existing levels of human disturbance (e.g., agricultural, residential, and petroleum-related developments) have contributed to the gradual elimination of the Upper Ojai Valley as suitable foraging and roosting habitat for this species so that only occasional sightings are now expected.

¹Telecon, Mr. Ken Kestner, Wildlife Biologist, United States Forest Service, and Mr. Fred Adjarian, Boyle Engineering Corporation, 26 March, 1980.

The numerous woodlands within the Upper Ojai Valley are expected to provide nesting and roosting habitat for several bird of prey species: the white-tailed kite, red-shouldered hawk, and golden eagle.² These species have been designated as fully protected species by the California Department of Fish and Game and are expected to forage over the project area from time to time.

²Telecon, Mr. Rich Clack, Wildlife Biologist, California Department of Fish and Game, and Mr. Fred Adjarian, Boyle Engineering Corporation, 26 March, 1980.

1000 West Gas & Oil Corp
Sisal Creek EA#1520

Riparian Growth in Slough Adjacent to Road
Sycamore Platanus occidentalis
Willow Salix sp
White Alder Alnus rhombifolia
Wild Raspberry Rubus sp
Catclaw Typha latifolia
Mule Eart Potamogeton zosterifolius

Flora and Fauna Inventory
Phoenix West Oil & Gas Corp. - Desert
Sept. 1975

Flora and Fauna Inventory
Phoenix West Oil & Gas Corp. - Desert
Sept. 1975
E.H. # 500

GENERAL SITE CONDITIONS

FLORA

FAUNA

Aves

Mammals

Reptiles and Amphibians

(-811)
Well
Chapman

Traps
Sitting alone

Water
None seen

Surrounding land use
Agriculture
Limited oil field operations
Native plant community

Roads
Dirt road on east side running NE-SW
None on site except bulldozer cleared
strip around well site

Fences
None on property

Trails
Vegetation (more dense area)

FLORA

()
12/11/12

Dominant species

None

12/11/12

Exposure of ground

Heather

2002

Colonity

None — (This is fire climax community
and no recent fire was evident)

Limited habitat

No

Rare or endangered plants

None

Use for wildlife

Not a good place

Food for wildlife

Low food utility

FLORA (cont.)

Calif. Thrasher *

Summit Finch +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

2000 ft. +

Wild Buckwheat +

White Sage

Hummingbirds

2000 ft. +

Vegetation of the surrounding area

Same as the immediate area

to the east

(
Faint
None obs.

None obs.

Limited habitat
N.C.

Secret. Terr. Indirect light.
None obs.

(
Rapidly expanding range in N.C.
N.C.

Waterfowl
N.C.

Gallinaceous birds
N.C.

None
None

(
Rare & somewhat scarce

3

FBI cont.

Cl...
The... of... much scat
... AME ...
some... ..

... ..
... ..
... ..

(

(

Con...

Direct Impact long-term game
= ...

Key areas will be removed
Native ... will be removed

Special ...
... ..

Alterations to ecological systems
in immediate area only.

Human use of the land
Will displace wildlife & plants

Water
... ..

Indirect Impact long-term game
... ..

Use of ...
... ..

Any ed. sec. environmental eff.

Removal of ...
Good & cover for wildlife

The relationship between local short-
term and long-term productivity and
the need for an enhancement of
long-term productivity

Short term
Oil production

Maint. and enhancement of long term
productivity
50 yr. displacement of plant &
animal life

Any measures for environmental changes
which would be needed in the
process of implementation

Flora and Fauna Inventory
Phoenix West Oil & Gas Corp. - Ben
Sept. 1975

Phoenix West Oil & Gas Corp.

EA# 120

Fauna

Although actual observations of wildlife by were limited (this was due primarily to time of day and heat (1:00pm, temp 100°) the dense chaparral growth, proximity of a live stream, relatively low human useage of surrounding areas and vegetative association with Los Padres National Forest, the project area can be considered excellent habitat for the wildlife generally associated with a chaparral community.

Birds Resident species

Turkey Vulture	✓ Wren Tit
Red-tailed Hawk	Bewick's Wren
Golden Eagle	California Thrasher
California Quail	Western Bluebird
Band-tailed Pigeon	Blue-gray Gnatcatcher
Mourning Dove	Loggerhead Shrike
Robin	Orange-crowned Warbler
Barn Owl	House Finch
Anna's Hummingbird	Lawrence's Goldfinch
✓ Scrub Wren	Rufous-sided Towhee
✓ Western Gnatcatcher	Brown Towhee
✓ Blue Titmouse	Rufous-crowned Warbler
✓ Bush Tit	Song Sparrow

Phoenix West Gas & Oil Corp.

EA #520

ves Wintering species

Sharp-shinned Hawk

Cedar Waxwing

Song's Phoebe

Yellow-rumped Warbler

Robin

Oregon Junco

Hermit Thrush

White-crowned Sparrow

Ruby-crowned Kinglet

Golden-crowned Sparrow

Fox Sparrow

Ives Breeding species (arrive in spring - depart in fall)

War-Will

Allen's Hummingbird

Phainopepla

Black-chinned Hummingbird

✓ Black-headed Grosbeak

Web-throated Flycatcher

~~Black-chinned Sparrow~~

5159. 1975. 12. 17. 1

VENTURA-COUNTY

~~CHAPARRAL~~

Flora & Fauna Inventory
Phoenix West Oil & Gas Corp.
Bear Creek
Sept. 1975

MAMMALS

Observed (cf)
~~Suitable Habitat~~

Common Name

Scientific Name

Bat, Big Brown

Eptesicus fuscus

Hollow place.

Bat, Hoary

Lasiurus cinereus

Bat, Mexican Free-tailed

Tadarida brasiliensis

Bat, Pallid

Antrozous pallidus

Hollow place.

Bat, Red

Lasiurus borealis

Bat, Western Big-eared

Plecotus townsendi

Bat, Western Mastiff

Eumops perotis

Bear, Black

Ursus americanus californicus

Mountains only.

Bobcat

Lynx rufus

Chipmunk, Lodgepole Pine

Eutamias speciosus

Chipmunk, Merriam's

Eutamias merriami

Slopes

Cottontail, Desert

Sylvilagus audubonii

Coyote

Canis latrans

Deer, Mule

Odocoileus hemionus californicus

Ventura County CHAPARRAL

MAMMALS (Continued)

Fox, Gray	<u>Urocyon cinereoargenteus</u>
Gopher, Southern Pocket	<u>Thomomys bottae</u>
Grasshopper Mouse, Southern	<u>Onychomys torridus</u>
Jackrabbit, Black-tailed	<u>Lepus californicus</u>
open, sparse vegetation.	
Kit Fox, San Joaquin	<u>Vulpes macrotis mutica</u>
Valley floor only.	
Mountain Lion	<u>Felis concolor californicus</u>
Mouse, Brush	<u>Peromyscus boylei</u>
Mouse, California	<u>Peromyscus californicus</u>
Slopes, dense vegetation.	
Mouse, Deer	<u>Peromyscus maniculatus</u>
Mouse, House	<u>Mus musculus</u>
Mouse, Pinyon	<u>Peromyscus truei</u>
Myotis, Fringed	<u>Myotis thysanodes</u>
Myotis, Long-eared	<u>Myotis evotis</u>
Myotis, Small-footed	<u>Myotis subulatus</u>
Hollow place.	
Opossum	<u>Didelphis marsupialis</u>
Lowlands.	
Pipistrelle, Western	<u>Pipistrellus hesperus</u>
Near watercourse.	
Pocket Mouse, California	<u>Perognathus californicus</u>
Pocket Mouse, San Joaquin	<u>Perognathus inornatus</u>
Rabbit, Brush	<u>Sylvilagus bachmani</u>

(Ventura County CHAPARRAL

MAMMALS (Continued)

Raccoon

Procyon lotor

Near water.

Rat, Agile Kangaroo

Dipodomys agilis

Open vegetation.

Rat, Giant Kangaroo

Dipodomys ingens

Sparse vegetation.

Rat, Heerman's Kangaroo

Dipodomys heermanni

Sparse vegetation

Ringtail

Bassariscus astutus

Near water, rock ridges and cliffs.

(Squirrel, San Joaquin Antelope

Ammosper mophilus nelsoni

Sparse vegetation.

Squirrel, White-tailed Antelope

Ammosper mophilus leucurus

Sparse vegetation.

Shrew, Ornate

Sorex ornatus

West meadows and near streams.

Shrew, Trowbridge

Sorex trowbridgei

Moist, humid.

Skunk, Spotted

Spilogale putoris

Skunk, Striped

Mephitis mephitis

Two miles from water.

Weasel, Long-tailed

Mustela frenata

Near water

Ventura County CHAPARRAL

MAMMALS (Continued)

Woodrat, Desert

Neotoma lepida

Woodrat, Dusky-footed
Heavy growth.

Neotoma fuscipes

1151
Sisal, 11-11-75

VENTURA COUNTY Flora and Fauna Inventory
~~CHAPARRAL~~ Phoenix West Oil & Gas Corp.
Bear Creek
MAMMALS Sept. 1975

(1151) Suitable Habitat (1151)

Common Name

Scientific Name

Bat, Big Brown

Eptesicus fuscus

Hollow place.

✓ Bat, Hoary

Lasiurus cinereus

✓ Bat, Mexican Free-tailed

Tadarida brasiliensis

Bat, Pallis

Antrozous pallidus

Hollow place.

✓ Bat, Red

Lasiurus borealis

✓ Bat, Western Big-eared

Plecotus townsendi

✓ Bat, Western Mastiff

Eumops perotis

✓ Bear, Black

Ursus americanus californicus

Mountains only.

✓ Bobcat

Lynx rufus

Chipmunk, Lodgepole Pine

Eutamias speciosus

✓ Chipmunk, Merriam's

Eutamias merriami

Slopes

✓ Cottontail, Desert

Sylvilagus audubonii

Coyote

Canis latrans

Deer, Mule

Odocoileus hemionus californicus

Ventura County CHAPARRAL

MAMMALS (Continued)

✓ Fox, Gray	<u>Urocyon cinereoargenteus</u>
✓ Gopher, Southern Pocket	<u>Thomomys bottae</u>
✓ Grasshopper Mouse, Southern	<u>Onychomys torridus</u>
Jackrabbit, Black-tailed	<u>Lepus californicus</u>
open, sparse vegetation.	
Kit Fox, San Joaquin	<u>Vulpes macrotis mutica</u>
Valley floor only.	
✓ Mountain Lion	<u>Felis concolor californicus</u>
✓ Mouse, Brush	<u>Peromyscus boylei</u>
✓ Mouse, California	<u>Peromyscus californicus</u>
Slopes, dense vegetation.	
✓ Mouse, Deer	<u>Peromyscus maniculatus</u>
Mouse, House	<u>Mus musculus</u>
Mouse, Pinyon	<u>Peromyscus truei</u>
✓ Myotis, Fringed	<u>Myotis thysanodes</u>
✓ Myotis, Long-eared	<u>Myotis evotis</u>
Myotis, Small-footed	<u>Myotis subulatus</u>
Hollow place.	
Opossum	<u>Didelphis marsupialis</u>
Lowlands.	
✓ Pipistrelle, Western	<u>Pipistrellus hesperus</u>
Near watercourse.	
✓ Pocket Mouse, California	<u>Perognathus californicus</u>
Pocket Mouse, San Joaquin	<u>Perognathus inornatus</u>
✓ Rabbit, Brush	<u>Sylvilagus bachmani</u>

Ventura County CHAPARRAL

MAMMALS (Continued)

✓Raccoon

Procyon lotor

Near water.

Rat, Agile Kangaroo

Dipodomys agilis

Open vegetation.

Rat, Giant Kangaroo

Dipodomys ingens

Sparse vegetation.

Rat, Heerman's Kangaroo

Dipodomys heermanni

Sparse vegetation

Ringtail

Bassariscus astutus

Near water, rock ridges and cliffs.

Squirrel, San Joaquin Antelope

Ammosper mophilus nelsoni

Sparse vegetation.

Squirrel, White-tailed Antelope

Ammosper mophilus leucurus

Sparse vegetation.

Shrew, Ornate

Sorex ornatus

West meadows and near streams.

Shrew, Trowbridge

Sorex trowbridgei

Moist, humid.

✓Skunk, Spotted

Spilogale putoris

✓Skunk, Striped

Mephitis mephitis

Two miles from water.

✓Weasel, Long-tailed

Mustela frenata

Near water

Ventura County CHAPARRAL

MAMMALS (Continued)

Woodrat, Desert

Neotoma lepida

✓ Woodrat, Dusky-footed
Heavy growth.

Neotoma fuscipes

Flora and Fauna Inventories
 Phoenix West Hill Gate
 Camp - Bear Creek
 Sept. 1975

VENTURA COUNTY

REPTILES AND AMPHIBIANS

CHECK LIST

Common Name	Scientific Name
1. Boas, Southern Rubber (R)	<u>Charina bottae</u>
2. Bullfrog	<u>Rana catesbeiana</u>
3. Coachwhip	<u>Masticophis lateralis</u>
4. Ensatina	<u>Ensatina eschscholtzii</u>
5. Frog, Red-legged	<u>Rana aurora</u>
6. Frog, Yellow-legged	<u>Rana boylei</u>
7. Gecko, Banded	<u>Coleonyx variegatus</u>
8. Kingsnake, California Mountain	<u>Lampropeltis zonata</u>
9. Kingsnake, Common	<u>Lampropeltis getulus</u>
10. Lizard, Blunt-nosed Leopard (E)	<u>Crotaphytus silus</u>
11. Lizard, California Legless	<u>Anniella pulchra</u>
12. Lizard, California Side-blotched	<u>Uta stansburiana hesperis</u>
13. Lizard, Coast Horned	<u>Phrynosoma coronatum frontale</u>
14. Lizard, Great Basin Fence	<u>Sceloporus occidentalis</u>
15. Lizard, Leopard	<u>biseriatus</u>
16. Lizard, Sagebrush	<u>Crotaphytus wislizenii</u>
17. Lizard, Southern Alligator	<u>Sceloporus graciosus</u>
18. Lizard, Western Fence	<u>Gerrhonotus multicarinatus</u>
19. Newt, California	<u>Sceloporus occidentalis</u>
20. Racer	<u>Taricha torosa</u>
21. Racer, Striped	<u>Coluber constrictor</u>
22. Rattlesnake, Southern Pacific	<u>Masticophis lateralis</u>
23. Salamander, Arboreal	<u>Crotalus viridis helleri</u>
24. Salamander, California Slender	<u>Aneides lugubris</u>
25. Salamander, California Tiger	<u>Batrachoseps attenuatus</u>
26. Salamander, Pacific Slender	<u>Ambystoma tigrinum californiensis</u>
27. Skink, Gilberts	<u>Batrachoseps pacificus</u>
28. Skink, Western	<u>Eumeces gilberti</u>
29. Snake, Black-headed	<u>Eumeces skiltonianus</u>
30. Snake, California Lyre	<u>Tantilla planiceps</u>
31. Snake, Common Garter	<u>Trimorphodon vandenbergi</u>
32. Snake, Glossy	<u>Thamnophis sirtalis</u>
33. Snake, Gopher	<u>Arizona elegans</u>
34. Snake, Long-nosed	<u>Pituophis melanoleucus</u>
35. Snake, Night	<u>Rhinocheilus lecontei</u>
36. Snake, Ringneck	<u>Hypsiglena torquata</u>
37. Snake, Two-striped Garter	<u>Diadophis punctatus</u>
38. Snake, Western Aquatic Garter	<u>Thamnophis couchi hammondi</u>
	<u>Thamnophis couchi</u>

Ventura County REPTILES & AMPHIBIANS

CHECKLIST (Continued)

<u>Common Name</u>	<u>Scientific Name</u>
39. Snake, Western Blind	<u>Leptotyphlops humilis</u>
40. Snake, Western Patch-nosed	<u>Salvadora hexalepis</u>
41. Snake, Western Terrestrial Garter	<u>Thamnophis elegans</u>
42. Spadefoot, Western	<u>Scaphiopus hammondi</u>
43. Toad, Southwestern	<u>Bufo microscaphus californicus</u>
44. Toad, Western	<u>Bufo boreas</u>
45. Treefrog, California	<u>Hyla californiae</u>
46. Treefrog, Pacific	<u>Hyla regilla</u>
47. Turtle, Western Pond	<u>Clemmys marmorata pallida</u>
48. Whiptail, Western	<u>Cnemidophorus tigris</u> <u>multiscutatus</u>

(R) = Rare

(E) = Endangered

Flora and fauna of Santa
Phoenix West of Cape
Carp. - Deer Creek
Sept. 1975
EH-520

VENTURA COUNTY

REPTILES AND AMPHIBIANS

CHECK LIST

Common Name	Scientific Name
1. Boas, Southern Rubber (R)	<u>Charina bottae</u>
2. Bullfrog	<u>Rana catesbeiana</u>
3. Coachwhip	<u>Masticophis flagellum</u>
4. Ensatina	<u>Ensatina eschscholtzii</u>
5. Frog, Red-legged	<u>Rana aurora</u>
6. Frog, Yellow-legged	<u>Rana boylei</u>
7. Gecko, Banded	<u>Coleonyx variegatus</u>
8. Kingsnake, California Mountain	<u>Lampropeltis zonata</u>
9. Kingsnake, Common	<u>Lampropeltis getulus</u>
10. Lizard, Blunt-nosed Leopard (E)	<u>Crotaphytus silus</u>
11. Lizard, California Legless	<u>Anniella pulchra</u>
12. Lizard, California Side-blotched	<u>Uta stansburiana hesperis</u>
13. Lizard, Coast Horned	<u>Phrynosoma coronatum frontale</u>
14. Lizard, Great Basin Fence	<u>Sceloporus occidentalis</u>
15. Lizard, Leopard	<u>biseriatus</u>
16. Lizard, Sagebrush	<u>Crotaphytus wislizenii</u>
17. Lizard, Southern Alligator	<u>Sceloporus graciosus</u>
18. Lizard, Western Fence	<u>Gerrhonotus multicarinatus</u>
19. Newt, California	<u>Sceloporus occidentalis</u>
20. Racer	<u>Taricha torosa</u>
21. Racer, Striped	<u>Coluber constrictor</u>
22. Rattlesnake, Southern Pacific	<u>Masticophis lateralis</u>
23. Salamander, Arboreal	<u>Crotalus viridis helleri</u>
24. Salamander, California Slender	<u>Aneides lugubris</u>
25. Salamander, California Tiger	<u>Batrachoseps attenuatus</u>
26. Salamander, Pacific Slender	<u>Ambystoma tigrinum californiens</u>
27. Skink, Gilberts	<u>Batrachoseps pacificus</u>
28. Skink, Western	<u>Eumeces gilberti</u>
29. Snake, Black-headed	<u>Eumeces skiltonianus</u>
30. Snake, California Lyre	<u>Tantilla planiceps</u>
31. Snake, Common Garter	<u>Trimorphodon vandenbergi</u>
32. Snake, Glossy	<u>Thamnophis sirtalis</u>
33. Snake, Gopher	<u>Arizona elegans</u>
34. Snake, Long-nosed	<u>Pituophis melanoleucus</u>
35. Snake, Night	<u>Rhinocheilus lecontei</u>
36. Snake, Ringneck	<u>Hypsiglena torquata</u>
37. Snake, Two-striped Garter	<u>Diadophis punctatus</u>
38. Snake, Western Aquatic Garter	<u>Thamnophis couchi hammondi</u>
	<u>Thamnophis couchi</u>

Ventura County REPTILES & AMPHIBIANS

CHECKLIST (Continued)

<u>Common Name</u>	<u>Scientific Name</u>
39. Snake, Western Blind	<u>Leptotrophlops humilis</u>
40. Snake, Western Patch-nosed	<u>Salvadora hexalepis</u>
41. Snake, Western Terrestrial Garter	<u>Thamnophis elegans</u>
42. Spadefoot, Western	<u>Scaphiopus hammondi</u>
43. Toad, Southwestern	<u>Bufo microscaphus californicus</u>
44. Toad, Western	<u>Bufo boreas</u>
45. Treefrog, California	<u>Hyla californiae</u>
46. Treefrog, Pacific	<u>Hyla regilla</u>
47. Turtle, Western Pond	<u>Clemmys marmorata pallida</u>
48. <input checked="" type="checkbox"/> Whiptail, Western	<u>Cnemidophorus tigris</u> <u>multiscutatus</u>

(R) = Rare

(E) = Endangered

APPENDIX H
CUMULATIVE PROJECT-GENERATED TRAFFIC

DETERMINATION OF EXISTING PRODUCTION PHASE ADT (by vehicle type)

Passenger Vehicles

Assuming one person to operate onsite production equipment, a total of 2.0 ADT will be generated per well. From Table 3 and Table 4, there are a total of 226 production wells. Therefore:

$$(226 \text{ wells}) \times (2.0 \text{ ADT/well}) = 452.0 \text{ ADT}$$

Pickup Trucks

From Table 3 and Table 4, estimates of ADT were made based upon the number of well sites:

<u>Permit No.</u>	<u>ADT</u>	<u>Mode of Oil Transport</u>	<u>Quantity (bbl/day)</u>
CUP-15	20	Pipe	---
CUP-325	12	Pipe	---
CUP-764	2	Pipe	---
CUP-224	4	Pipe	---
CUP-293	4	Truck	28.0
CUP-3319	2	Truck	232.8
CUP-3344	2	Pipe	---
CUP-3543	2	Truck	5.6
(3)	2	Truck	38.8
M-45	2	Truck	2.0
M-26	2	Truck	12.0
M-74	2	Truck	2.0
CUP-37	2	Truck	6.0
ANDERSON	2	Truck	18.0
CUP-3344 MOD	10	Pipe	---
CUP-3653	2	Pipe	---
	72 ADT		345.2

Tank Trucks (existing)

From Table 3, a distinction was made as to which permittee would transport production oil by pipe or by truck. Once this determination was made, the total quantity (bbl/day) was calculated (using information from Table 2) for all production oil currently "trucked out." Given the known volume of a standard tank truck (180 bbl/truck), total tank truck ADT was determined as follows:

$$(345.2 \text{ bbl/day}) : (180 \text{ bbl/truck}) = 1.9 \text{ trucks/day}$$

Assuming approximately two tank trucks per day, each generating 2.0 ADT:

$$(2 \text{ trucks}) \times (2.0 \text{ ADT/truck}) = 4.0 \text{ ADT}$$

It was assumed that an additional 3.0 ADT would be generated as a result of the approval of additional oil permits and any "overflow" situation that could occur within the existing ARCO pipeline.

Tank Trucks (future)

Using assumptions similar to those presented above, it was determined that there would be a reduction in future tank truck traffic. A total of one and one-half tank trucks or 3.0 ADT was deemed sufficient to handle future production needs.

DETERMINATION OF PROPOSED PRODUCTION PHASE ADT
(by vehicle type)

Passenger Vehicles

Total passenger vehicle ADT calculations were based upon information provided by each applicant regarding personnel requirements during this phase:

<u>Proposed Permit No.</u>	<u>No. of Persons</u>
CUP-3680/3881	10
CUP-3688	3
CUP-3869	2

Therefore: (15 people) x (2.0 ADT/person) = 30 ADT

Pickup Trucks

Assuming a high find scenario, the amount of pickup truck traffic was calculated using information from Table 5:

(9 sites) x (2.0 ADT/site) = 18.0 ADT

Tank Trucks

From Footnote 2 of Table 10 and information from Table 5, the total quantity of oil produced (bbls/day) was calculated. Given the known volume of a standard tank truck (180 bbl/truck), total tank truck ADT was determined as follows:

(1,300 bbls/day) : (180 bbls/truck) = 7.2 trucks/day

Assuming approximately seven tank trucks per day, each generating 2.0 ADT:

(7.0 trucks) x (2.0 ADT/truck) = 14.0 ADT

DETERMINATION OF PROBABLE PRODUCTION PHASE ADT
(by vehicle type)

Passenger Vehicles

Total passenger vehicle ADT calculations were based upon information given in Table 6 regarding the number of high find production wells:

(46 wells) x (2.0 ADT/well) = 92.0 ADT

Pickup Trucks

Assuming a high find scenario, pickup truck traffic was calculated using information from Table 6:

(28 sites) x (2.0 ADT/site) = 56.0 ADT

Tank Trucks (initial)

From information presented in Footnote 2 of Table 10 and Table 6, a distinction was made as to which permittee would transport production oil by pipe or by truck. Once this determination was made, the total quantity of oil produced (bbls/day) was calculated. Given the known volume of a standard tank truck (180 bbl/truck), total tank truck ADT was determined as follows:

(1,700 bbls/day) : (180 bbls/truck) = 9.4 trucks/day

Assuming approximately nine tank trucks per day, each generating 2.0 ADT:

(9.0 trucks) x (2.0 ADT/truck) = 18.0 ADT

Tank Trucks (future)

From information presented in Footnote 3 of Table 10 and Table 6, a distinction was made as to which permittee would transport production oil by pipe or by truck. Once this determination was made, the number of tank trucks calculated reflect those permittees who (in the future) will continue to "truck out" production oil after all pipelines are constructed:

$$(1,640 \text{ bbls/day}) : (180 \text{ bbls/truck}) = 9.1$$

Assuming approximately nine trucks per day, each generating 2.0 ADT:

$$(9.0 \text{ trucks}) \times (2.0 \text{ ADT}) = 18.0 \text{ ADT}$$

APPENDIX I

DRAFT DISTRIBUTION LIST FOR AMENDED EIR

Appendix I

DRAFT EIR DISTRIBUTION AND NOTIFICATION LIST

A. EIR Sent to:

1. Federal Agencies

U.S. Environmental Protection Agency, San Francisco
U.S. Forest Service, Ojai (Walter Schloer), Santa Barbara
U.S. Fish and Wildlife Service, Laguna Niguel (Gary Wheeler,
John Wolfe)
U.S. Corps of Engineers - Navigation Branch, Los Angeles
(Ted Yee)
U.S. Soil Conservation Service

2. State Agencies

State Clearinghouse (15 copies)
-State Division of Oil and Gas, Santa Paula, Sacramento -
State Fish and Game, Long Beach (Duane Maxwell)
Regional Water Quality Control Board, Los Angeles
Caltrans, Los Angeles
University of California Farm and Home Advisor, Ventura

3. County Agencies

Ventura County Air Pollution Control District
Ventura County Flood Control District
Ventura County Public Works Agency
Ventura County Sheriff's Department
Ventura County Property Administration Agency
Ventura County Fire Prevention Bureau
Ventura County Resource Management Agency Counter
Ventura County Clerk of the Board
Ventura County Environmental Report Review Committee

4. Local Agencies

City of Ojai
City of Santa Paula
Ojai Resource Protection District
Casitas Municipal Water District
Ojai Unified School District

5. Public Depositories

E.P. Foster Library
Ojai Library
Santa Paula Library
Summit Fire Station

6. Organizations:

Ojai Valley Area Plan Technical Advisory Committee
Ojai Valley News (Polly Bee)
Star Free Press (Greg Zoroya)
Citizens to Preserve the Ojai
Citizens to Preserve the Upper Ojai
East Ojai Valley Property Owners' Association
Sulphur Mountain Property Owners' Association
Casitas Municipal Water District

DRAFT EIR DISTRIBUTION AND NOTIFICATION LIST - Continued

B. Notice of EIR Availability:

Audubon Society
The Greater Ojai Fund
Sierra Club
League of Women Voters
Southern California Edison Company
Environmental Coalition
United States Geological Survey
Ojai Resource Association District

Agnes Baron	John Taft
Janet Beymer	Charles Andrews
John. R. Whitman✓	Paul Kruse
Muriel Sharkey	Howard Pavlik
Betty De Busschere✓	Stephen Reiss
Dean O. Thompson	Rusty Bostwick
Dok Smith	L.H. Stewart✓
John M. Long	Jane Helm

All property owners located within 300 feet of the subject property.

APPENDIX J

COMMENTS RECEIVED AND AGENCY RESPONSE

(To be inserted at the end of the public review/
comment period for the revised version of CUP-3543)



RESOURCE MANAGEMENT AGENCY
county of ventura

Planning Division

Dennis Davis, AICP
Manager

June 16, 1980

Mr. John R. Whitman
12615 Koenigstein Road
Santa Paula, CA 93060

Dear Mr. Whitman:

Subject: Response to Your Comments Regarding the EIR Update for
Conditional Use Permit No. CUP-3543 (Phoenix West-
Agnew Oil Well)

The purpose of this letter is to respond to your comments provided by your wife per telephone communication to Steve Chase of the Planning Division on May 14, 1980, regarding the adequacy of the EIR Update for CUP-3543. A copy of this letter will be included in the final version of that report under Appendix J. Comments Received and Agency Response. A copy of that final report will be forwarded to you in the next few days.

During said communication, Mr. Chase requested Mrs. Whitman to forward your comments in writing to us for inclusion in the final report. As explained, the purpose of the request was to avoid misinterpretation of your concerns by staff. Since we have not received written comments nor further verbal comments from you regarding the EIR update, staff is herein responding to your concerns as understood from the discussion with Mrs. Whitman on May 14.

Extent of Physical Area Assessed

Mrs. Whitman expressed concern over the extent of the physical area assessed in the cumulative impact portion of the EIR Update (pages 28-54). Staff understood that in your opinion, each of the environmental topics discussed in the report should have been assessed relative to the physical environment and cumulative project setting extending from Santa Paula to Lake Casitas, rather than the smaller physical area which staff felt was sufficient for analysis. For reference, staff determined (through the Initial Study and Notice of Preparation processes) that the extent of physical area necessary for the cumulative assessment of each topic, varied as follows:

800 South Victoria Avenue, Ventura, CA 93009

Mr. John R. Whitman
June 12, 1980
Page 2

<u>Topic</u>	<u>Area of Analysis</u>
Traffic	Highway 150 from Dennison Grade to Santa Paula; and Koenigstein Road.
Air Quality	Ojai Valley/Santa Paula Air Shed
Noise	Sisar/Bear Creek Area
Groundwater	Upper Ojai Valley (portions)
Flora & Fauna	Upper Ojai Valley
Aesthetics	Upper Ojai Valley

Staff's determination to limit the cumulative assessments to these areas was based upon our desire to provide a meaningful frame of reference for comparing the added impacts coming from projects within the same physical setting. Staff felt that it was unreasonable that each topic be assessed relative to the total area between Santa Paula and Lake Casitas, because for most of the topics (with the exception of air quality) the physical size of that area is too broad to provide a meaningful frame of reference for cumulative project impact analysis. For example, the analysis of traffic, noise, and aesthetic impacts generated by oil and gas production projects in Santa Paula do not generally combine with or add to those impacts generated by such projects in the Upper Ojai Valley. Staff believes that the same holds true for oil projects located west of Lake Casitas.

Extent of Cumulative Projects Assessed

Mrs. Whitman indicated that in your opinion, the EIR Update underestimates the amount of future oil and gas production activity which could take place in the Upper Ojai Valley, Ojai, National Forest area, and Santa Paula; and therefore, the report underestimates the amount of environmental impact which could occur given future cumulative project buildout. Mrs. Whitman specifically cited what you believe to be deficiencies in analysis, as follows:

1. COMMENT:

Since CUP-15 (Arco) does not include a condition which would limit the number of wells/production units which could be developed within its permit boundaries, nor includes a permit expiration date, an undeterminable amount of oil well production activity could occur under that permit. Since said amount of activity could exceed that which was accounted for in the EIR Update, the extent of possible cumulative project impacts discussed could be underestimated.

Mr. John R. Whitman
June 12, 1980
Page 3

RESPONSE:

Staff believes that the EIR Update is adequate in its treatment of CUP-15, computation of future cumulative project activities, and associated impact analysis. First, the reported information on future oil production activities under CUP-15 and other permits and/or mineral leases were derived by requesting each of the oil operators to respond to the attached questionnaire. Furthermore, as explained on page 28 of the report, numerous discussions were held between the oil operators, staff, the EIR consultants and the State Division of Oil and Gas to obtain factual information, credible estimates of future production, and clarification of data provided. In essence, every reasonable effort was made to develop reliable medium and high-find production scenarios for use in the cumulative project assessments.

Secondly, pages 33 and 37 of the report fully discuss means by which the cumulative project totals could become offset (either up or down) due to many direct and indirect variables. The report conversely implies that the impact findings could adjust accordingly. For example, although the reader is told that Arco plans to develop five (5) additional wells on CUP-15, the actual amount of development under that permit may exceed or fall short of that amount given various factors. The report then discusses those factors, including the availability of exportation facilities (which the report indicates are in short supply), the availability of drilling rigs (which are also reported in short supply), known versus unknown reserves, negative public attitudes, deregulation of the price of domestic crude oil, the opening of large blocks of land in the National Forest for oil development, etc. Again, it is staff's belief that the report is adequate in defining cumulative project impacts in that reasonable "good faith" efforts have been made to qualify unknowns or variable factors faced by the oil industry and government in determining the future amount of production activity and resultant environmental impact.

2. COMMENT:

No information is available on the extent of future production activity within the National Forest. The cumulative analysis could be offset if large blocks of National Forest land are opened up for oil development.

RESPONSE:

Staff notes that Figure 8 of the EIR Update illustrates Federal lands within the project planning area that are under consideration for oil and gas exploration, and page

Mr. John R. Whitman
June 12, 1980
Page 4

37 of the report briefly discusses the analysis procedures used by the Forest Service and the Bureau of Land Management for such projects. Once again, the report points out that oil production within the National Forest represents a variable factor which could affect the extent of probable cumulative production activities. Conversely, staff believes that this factor could offset the identified cumulative impacts; however, the extent to which such offset could occur is undeterminable until the Forest Service completes their environmental studies and provides preliminary recommendations on the matter. These actions are expected to take place later this year.

Relative to matters not pertaining to the EIR Update, but rather to the condition of the permit, Mrs. Whitman indicated that all required landscaping has died, and flaring continues to be a nuisance. In response to your concerns, staff has contacted the present operator to immediately remediate the landscaping problem. Relative to flaring, staff reminds you of Condition No. 31 of the permit which allows the flaring of 100,000 cubic feet of natural gas per day. Staff checked with the Air Pollution Control District on this matter. District staff indicated that they do not believe said flaring from project has presented a serious problem.

In conclusion, staff believes that every reasonable "good faith" effort has been made in the development of the EIR Update, and that said report should be certified by the Board of Supervisors as sufficiently meeting all court ordered and administrative criteria for adequacy. Staff notes that the cumulative assessments provided in the EIR Update are identical to that which were provided in the EIR for CUP-3688 (Argo), and that the Board of Supervisors previously found the cumulative assessment to be adequate in its certification of the Argo EIR.

If you have any questions regarding this letter, please contact Steve Chase of the Planning Division at (805) 654-2460.

Sincerely,

RESOURCE MANAGEMENT AGENCY


Robert K. Laughlin, Supervisor
Subdivision & Environmental Review Sections

RKL:dv/664

Attachment: Questionnaire

ENVIRONMENTAL RESOURCE AGENCY
county of ventura

Building & Planning Services

Victor R. Husbands
Director

May 10, 1979

Dear Sir or Madam:

Subject: Future Oil Drilling/Production Activity in the Upper Ojai Valley


The Ventura County Environmental Resource Agency, has contracted with Boyle Engineering Corporation, Ventura California, to prepare a group of Environmental Impact Reports which will focus specifically on four proposed oil drilling/production Conditional Use Permits and cumulatively will address the future projected oil drilling/production activities in the Upper Ojai Valley.

In an attempt to develop reasonable projections for the future activities, we are asking all oil drilling/production operators in the Upper Ojai Valley to assist us by completing the attached questionnaire. Additionally, we would welcome any information and comments you have on this subject, as reflected from your experience and knowledge gained from your existing operations and future goals. We will respect your wishes concerning any information you feel is confidential.

Please complete and mail the questionnaire in the attached envelope by May 25, 1979, if at all possible. For any clarifications and assistance you may require in this matter, call Mr. Bruce Smith, Ventura County Planning Division, (805) 648-6871, or Mr. Rick Mauck, Boyle Engineering Corporation, (805) 648-6871.

Sincerely,

ENVIRONMENTAL RESOURCE AGENCY


Victor R. Husbands, Director
Building and Planning Services

VRH:dp41y

Attachment: Figure 1 - Existing Oil Drilling Permits

MAIN OFFICE
800 South Victoria, Ventura, CA 93009

BRANCH OFFICES
Camarillo: District 3, 2400 Ventura Boulevard, Camarillo, CA 93010 (805) 482-8841
Simi Valley: District 2, 3200 Cochran Street, Simi, CA 93065 (805) 522-0012

UPPER OJAI VALLEY
OIL DRILLING/PRODUCTION ACTIVITY
QUESTIONNAIRE

Preparer's Name/Phone _____

Firm/Address _____

CUP No(s). (If Applicable) _____

1. Please use the attached map to identify locations and number of probable future drill sites for CUPs or areas under your control. Also please note number of production wells per drill site.
2. Please use the attached map to identify locations of all existing and probable future drilling/production support facilities (pipelines, transfer facilities, gathering points, access roads, etc.) for CUPs or areas under your control.
3. Do you have any comments on the timing when the proposed and probable drilling/production activities may be instituted? (Note on maps if applicable)

4. Please comment on anticipated oil production rates typically found in the Upper Ojai Valley:

High find - _____

Other Comments - _____ Medium (Average) find - _____

5. Do you have any other comments on future oil drilling/production activities in the Upper Ojai Valley? (Attach sheets if necessary.)

Would you like this information to remain confidential? Yes _____ No _____

Please include when you return your questionnaire any additional data, information, maps, letters, etc. you feel may be helpful to us.

Would you like to discuss this questionnaire further with us?
Yes _____ No, not at this time _____

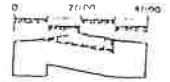
Thank you very much for your time and assistance in this matter.

RICK MAUCK, BOILE ENGINEERING CORPORATION
Ventura, (805) 643-6871
and the VENTURA COUNTY ENVIRONMENTAL RESOURCE AGENCY

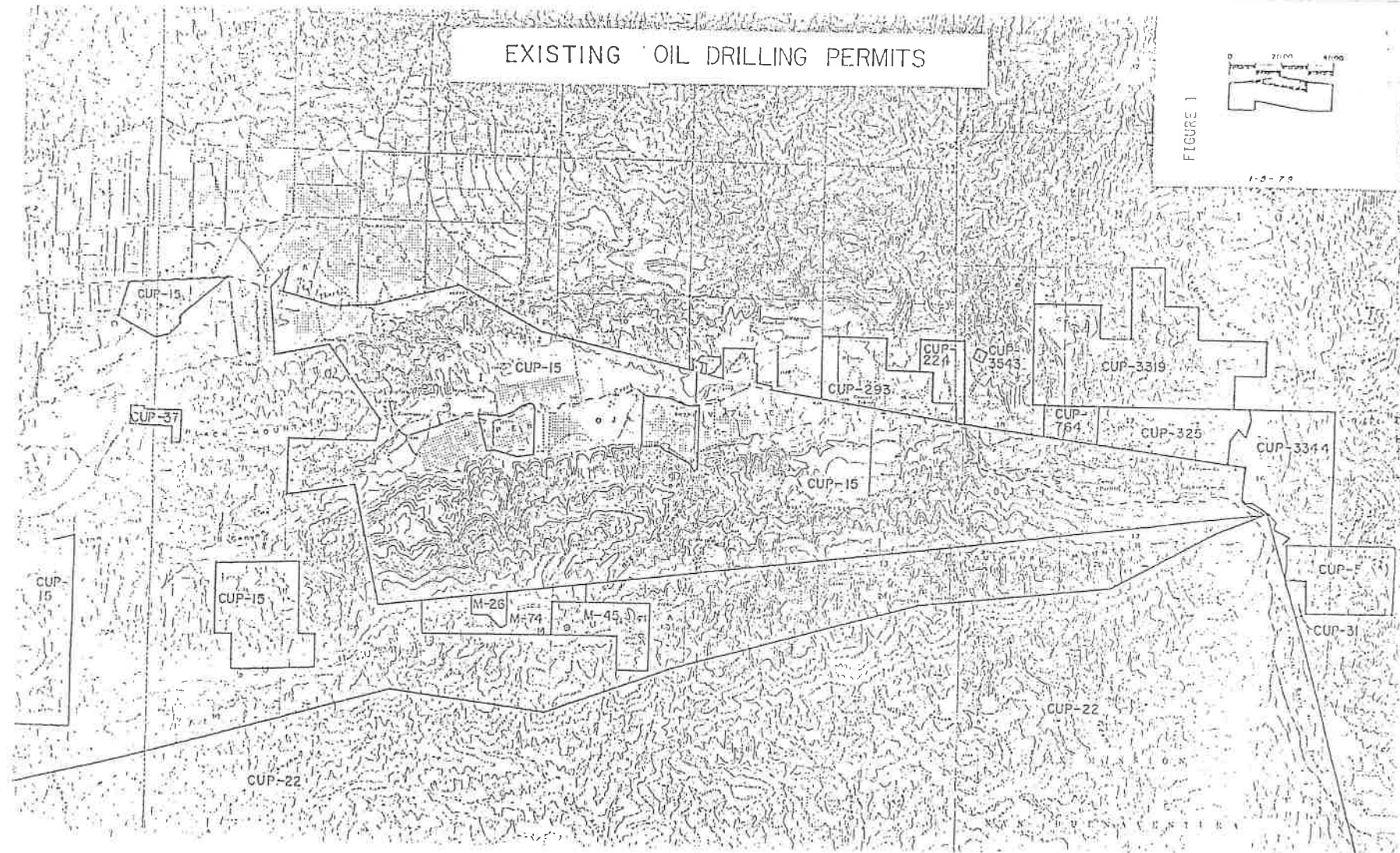
P41y2

EXISTING OIL DRILLING PERMITS

FIGURE 1



1-5-79



12601 Koenigstein Rd.
Santa Paula, Ca. 93060
May 1, 1980

Mr. Steve Chase
Planning Division
County of Ventura
800 S. Victoria Ave.
Ventura, Ca. 93003

Dear Mr. Chase:

RE: CUP 3543 Phoenix West Oil and Gas Co.

We have reviewed the Draft EIR Update. It seems very similar to the EIR for CUP 3688 Argo Petroleum Company. It does not include a review of the residential land use in the area or address the impact on residential neighbors.

We live on the property adjoining the North West corner. We observe flaring frequently and are especially concerned about flaring during the fire season.

What sort of landscaping is being required? We would like to see eucalyptus trees planted very close together around all oil well and tank sites. We do not think native shrubs grow tall enough to screen huge tanks. Attached is some suggested landscaping trees for fire areas. There are no signs of any landscaping. Irrigation and maintenance of any landscaping should also be required.

The oil company vehicles use the access road near our mailboxes. The Moores, mineral owners, would not share in the cost of resurfacing the road last year and no restoration is being made. Very heavy trucks break off the edges and make a big hole where they turn off.

Could the County consider flaring, landscaping and road maintenance during the monthly and yearly reviews as mentioned in Condition 15 and 35?

Sincerely,

Philip G. and Ruth M. Smith
Philip G. and Ruth M. Smith

1 Enclosure

which are very attractive to birds. Readily available at nurseries.

Shrubs

Ceanothus griseus horizontalis (Carmel creeper) - Low growing, drought-resistant, evergreen shrub with thick leathery leaves and bright blue flowers in the spring. It is used as individual specimens or in clumps of two or three plants. A single plant will spread to as wide as 10 feet. Most nurseries have it.

Cistus vellosus (rockrose) - Low, spreading evergreen shrub, drought-resistant, attractive purple flowers.

Heteromeles arbutifolia (toyon) - One of the best California natives. This drought-resistant plant bears masses of brilliant red berries that remain for many months. It should be used as a large specimen shrub or tree, and is available from most nurseries.

Nerium oleander (oleander) - Sturdy, tough, attractive summer-flowering shrub that is very tolerant of drought. The plant grows to a height of 20 feet and may reach a width of 25 feet.

CAUTION: Although widely grown, it should be realized that all parts of this plant are poisonous.

Q. Many of us need good reliable information regarding fire-retardant plants. Are there any you consider fireproof?

A. No plant will stop an advancing fire but many resist fire better than others and can actually slow its progress. Catalina cherry, Italian buckthorn, myoporum, prostrate rosemary, germander and evergreen sumac are among the preferred resistant plants. The Los Angeles State and County Arboretum in Arcadia publishes a booklet that lists others.

by paul b. engler

Questions will be answered only when a self-addressed stamped envelope is enclosed. Write to the GARDEN TOLLIER, Home magazine, Los Angeles Times, Times Mirror Square, Los Angeles, Ca. 90058. Please allow at least two weeks for a reply. Plant specimens sent for determination of trouble should be wrapped and enclosed in an envelope. Boxes are not accepted.

Rhamnus alaternus (Italian buckthorn) - Large evergreen shrub or small tree with dark green leaves. It bears deep blue berries in the fall, and is extremely drought-tolerant. A limited supply is available.

Rhus integrifolia (lemonade berry) - Native shrub that is very drought-tolerant once established. A limited quantity is being produced.

Trees *Ceratonia siliqua* (carob) - Readily available tree commonly used in landscapes, parks, and streets in southern California. It is pest free and tolerant of alkaline soil and drought.

Eucalyptus spp. - Many species of drought-resistant trees, especially adapted to California climate. May be chosen in all shapes and sizes, flower color, etc. Produce considerable litter, and must be well pruned. Should be kept away from structures.

Schinus molle (California pepper) - Very drought-tolerant, must be well pruned and produces some litter. Generally available.

Schinus terebinthifolia (Brazilian pepper) - Grows 15 to 30 feet high and requires little care except occasional pruning to maintain its shape. It requires irrigation and is not hardy where temperatures drop below 20 degrees. Generally available.

Umbellularia californica (California laurel) - California native recommended for erosion control. Not all nurseries carry it.

Washingtonia spp. (fan palms) - Upright palms which are drought-resistant and well-adapted in milder areas. Old fronds must be removed to eliminate the fire hazard.

Many other palms would be adaptable and usable. Check with your nurseryman.

To Landscape Burned Areas

- Prevent erosion with:
Jute matting or straw mulch
Quick-growing ground covers
- Control regrowth of undesirable brush
- Plant trees and shrubs

Catalina cherry (*Prunus lyonii*) to 45 ft. rapid growth
Statin lucidifolia (*Rhamnus alaternus*) 10-20 ft. fast growth
Myoporum (*insulare*) 20-30 ft. rapid growth

Fireman recommends irrigated fruit trees.
* Characteristics as shown in Sunset Gardens B&W

21 Sept. 7 of Agri., 21 of C. Div of Agri Science 197

RESOURCE MANAGEMENT AGENCY
county of ventura

Planning Division

Dennis Davis, AICP
Manager

June 18, 1980

Ruth M. and Philip G. Smith
12601 Koenigstein Road
Santa Paula, CA 93060

Dear Mr. & Mrs. Smith:

Subject: RESPONSE TO YOUR LETTER REGARDING THE EIR UPDATE FOR
CONDITIONAL USE PERMIT NO. CUP-3543 (PHOENIX WEST OIL
DEVELOPMENT - UPPER OJAI VALLEY)

The purpose of this letter is to respond to your letter of May 1, 1980 regarding the draft EIR Update. A copy of your letter and this response will appear in the final version of that report, which is to be submitted to the Board of Supervisors on June 24, 1980 for certification of compliance with the State EIR Guidelines and the California Environmental Quality Act. By now you should have received a copy of the legal notice regarding the Board's public hearing of June 24; if not, please contact Steve Chase of the Planning Division at (805) 654-2460 for information and assistance. A copy of the final EIR Update is attached.

In response to your opening remarks regarding the similarity of the EIR Update with the EIR for CUP-3688 (Argo), staff suggests that you carefully review the Introduction to the Update, provided on pages 1, 2, and 3. You should note that the Update was developed by combining the "individual" project impact assessments included in the original EIR for this project, with the "cumulative" project impact assessments included in the Argo EIR and other EIRs which were developed as part of the Upper Ojai Valley Oil and Gas Development Master EIR Study, 1978-1980. The Introduction also discusses the lawsuit which resulted in the County preparing the Update. The Introduction also discusses the purpose of the Board of Supervisors public hearing of June 24, 1980 and related matters that the Board of Supervisors will be requested to act upon.

Contrary to your opening statements regarding land use impacts, staff believes that the Update provides an adequate assessment of the problems/conflicts between Valley residents and oil and gas development activities. Specifically, the report briefly identifies existing and planned residential growth in the Upper Ojai Valley on page 31; discusses negative public attitudes towards oil activities in the area; indicates that there have been numerous public complaints about oil activities in the area; and in particular cites local public criticism of oil related truck traffic (see pages 33 and 37). On page 37, the Update notes that, "By expanding the oil drilling/production activities, in general, in the Upper Ojai, probable future projects are likely to increase the interface between Valley residents and oil activities, and thus increase land use conflicts."

800 South Victoria Avenue, Ventura, CA 93009

Ruth M. and Philip G. Smith
12601 Koenigstein Road

June 18, 1980
Page 2

Furthermore, three of the six cumulative assessments presented in the Update (traffic, noise and aesthetics) are directly related to said interface and conflicts experienced. Staff believes that within the context of an EIR, nothing more could be written which would further the basic understanding of the land use related problems/conflicts between Valley residents and oil and gas development activities.

In response to your comments on flaring, staff notes that Condition Number 31 of the existing permit allows the flaring of 100,000 cubic feet of natural gas per day (see Appendix D). Staff checked with the Air Pollution Control District regarding your comment on this matter. District staff indicated that present management plans account for these flarings, and that serious problems have not been detected nor complaints reported. Staff also checked with the Fire Prevention District regarding your concerns about flaring in an extreme fire hazard area. District staff indicated that adherence to Condition Numbers 59 through 63 of the existing permit would provide adequate public safety protection for the project area. The District's records show that the flaring equipment and water storage tank capacity meet their fire code requirements. If you have additional concerns regarding these matters, it is suggested that you directly contact Larry Scott of the Air Pollution Control District at (805) 654-2801 or Fred Peebles of the Fire Protection District at (805) 654-0440.

Thank you for submitting the information on shrubs, trees and fire-retardant plants. At the time when the landscape plan for the project was developed (late 1978), our emphasis was upon native re-vegetation because of its high potential for fast and effective growth and screening. Staff did not, of course, anticipate that the operator would not maintain the landscaped areas and allow much of the re-vegetation to fail. Upon learning of this situation from your letter and an additional resident in the area, staff contacted the operator and instructed him to immediately remediate the problem by re-vegetating in accordance with the approved landscaping plan, as well as provide effective maintenance to assure on-going plant growth and screening.

In response to your concerns regarding access road conditions, Condition Number 27 of the existing permit requires oil resurfacing for retardation of dust collection and dispersion from vehicular traffic. Base material and/or asphalt resurfacing were not felt to be necessary in this regard. Staff understands your concerns regarding ruts or holes in the road and suggest your continued contact with Phillip Moore for resolution of this matter between yourselves.

Lastly, at the time that the permit was approved and conditions imposed, staffing levels permitted annual and more frequent inspections of the project site and enforcement of permit conditions by the Planning Division. Mr. Chase of the Planning Division was at that time the zoning enforcement contact for this project, and frequent site inspections were conducted for purposes of condition checking and resolution of complaints. However, given reduced revenues and changing fiscal priorities, the Planning Division enforcement staff was reduced in 1978 from four to one personnel. This situation may have generally contributed to the loss of

Ruth M. and Philip G. Smith
12601 Koenigstein Road

June 18, 1980
Page 3

landscaping and alleged deterioration of roadway maintenance during the last couple of years. It is expected, however, that given recent implementation of new enforcement techniques and a better managed program, that minor condition problems such as those which you cite in your letter can be taken care of by staff in the future. In this regard, staff requests that if these problems continue to persist, that you contact Drew Madrigal of the Planning Division at (805) 654-2462 for enforcement related information and assistance.

Sincerely,

RESOURCE MANAGEMENT AGENCY


DENNIS T. DAVIS, AICP
Manager, Planning Division

DTD:bn

May 7, 1980

Robert Laughlin, Supervisor
Environmental Review Section
Resource Management Agency
800 South Victoria Avenue
Ventura, California - 93009

RE: Amended EIR for
Phoenix West Oil Corporation

Dear Mr. Laughlin:

I find the document inadequate in two specific areas namely,

1. Policing power for the protection of fresh potable ground water.
2. The lack of a provision limiting the use of certain chemicals or acids during the drilling and completion of the well.

The protection of fresh potable water is too important to be dependent upon the prerogative of DOG's remote control or the integrity of drilling contractors or those of oil company culture.

History will show that California's DOG was established by and in the interests of the leaders in the oil industry specifically against independent promoters and/or so-called unscrupulous competitors and in general to protect the purity of OIL from contamination by WATER - good or bad.

Theory, on paper, is one thing -- Practice, on-the-job, is another. Environmentalists in the oil patch are loved like the plague. (As an aside) Upper Ojai graffiti on an oilfield gate reads, "Have a Environmentalist for Breakfast". In spite of all the "stool pigeon instruments" drilling contractors and their assistants are noted for their ability to "Dog the log".

There should be an independent 24 hour on-the-job expert inspector to police the protection of fresh potable ground water from spud in to completion.

There are innumerable chemicals or acids pumped into mother earth via oilwells, for various purposes, and many are toxic. The use of such chemicals as additives in the treatment of drilling mud, its weight or reduction or viscosity or other, must be barred. The additive, known in oilfield vernacular as "panther piss" (content guarded), used to speed up or retard cement setting time, is custom in the oil game.

According to Bob Hurst, a senior official of Dow Chemical's well stimulation division, acid is used to etch more fissures and cavities into the rock and will serve as a conduit for increased flows of oil and gas after special fluids, driven by powerful hydraulic pumps, further open the rock formation to distances up to two miles from the drilling column. And,

According to Dr. Samuel Epstein in POLITICS OF CANCER, by November 1977 there were 33,000 registered chemicals in common use in the United States and many are teratogens (causing birth deformities) and mutagens (causing mutations). Our survival is further threatened by underground dumps from which toxic wastes often seep into ground water, he says. And,



Dowell's spacers and washes are the clean start you need to keep cement and drilling fluids separated during completion.

And that means a better cement bond. And more effective isolation of productive zones.

Dowell has a spacer for either water-base or oil-base muds: Spacer 1000 or Spacer 1001. Both act as a barrier to prevent drilling fluid and cement from mixing and restricting flow in the annulus. And both spacers

That's the Dowell Difference.

offer the ingredients essential to a good, clean cement job: excellent mud removal, low fluid loss, viscosity control and weight variability.

For removal of drilling fluid from the pipe and the formation face before cementing, Dowell's washes have the

perfect cleaning agents. Chemical Wash CW7 is a special combination of surfactants that can be applied in most wells. Chemical Wash CW100 is designed for use when both good fluid removal and low fluid loss are essential.

For a good bond, let Dowell's spacers and washes give your cementing operation a clean start.

Another part of the Dowell Difference.



*Trademark of The Dow Chemical Company.

DOWELL DIVISION OF DOW CHEMICAL U.S.A. AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY HOUSTON, TEXAS 77032
Circle 461 on Reader Service Card

For cementing success in the future,
look at our success in the past with

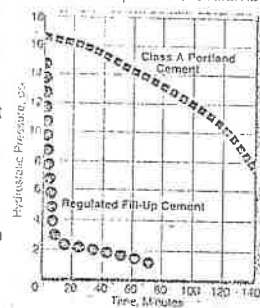
SURFACE CASING

Dowell's experience in cementing surface casing has taught us how to solve a lot of problems you're likely to see on your next surface cementing job. We'll help you eliminate those problems before they start.

Fallback, perhaps the most common problem of all, occurs when cement is lost to formation voids or highly permeable zones. Our Regulated Fill-up Cement prevents fallback by gelling when pumping is stopped. And, it remains self-supporting by transferring hydrostatic pressure from downhole to the pipe and formation walls until it sets.

That's just one example of how our experience can save you time and money. We also have additives that provide high early compressive strength to prevent loss of the

bottom joint. And highly efficient slab-in equipment to reduce displacement volume



and pumping time when using large diameter surface pipe.

To find out more about making your surface cementing jobs successful in the future, contact your Dowell representative today.

*Trademark of the Dow Chemical Company

DOWELL DIVISION OF DOW CHEMICALS S.A., A HYDRA-TECH UNIT OF THE DOW CHEMICAL COMPANY, HOUSTON, TEXAS 77002

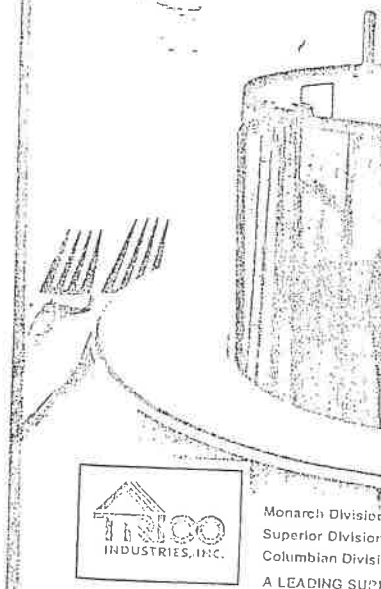
- 20-22 Southern Gas Association annual convention, Hyatt Regency Hotel, Dallas.
- 20-23 Canadian Institute of Mining and Metallurgy annual meeting, Sheraton Centre Hotel, Toronto, Ont.
- 20-23 Symposium on enhanced oil recovery, Tulsa. Sponsors: Society of Petroleum Engineers and U.S. Department of Energy.
- 21-23 National Association of Environmental Professionals annual conference, Washington, D.C.
- 21-25 International Institute of Synthetic Rubber Producers annual meeting, Mexico City.
- 22-23 Pacific Coast Gas Association distribution conference, Little America Hotel, Salt Lake City, Utah.
- 23-25 Rocky Mountain Oil and Gas Association mid-year meeting, Kirkwood Motor Inn, Bismarck, N.D.
- 30-May 2 API Marketing Department annual meeting, Hyatt Regency Hotel, Phoenix.

MAY

- 1-2 Oklahoma Independent Petroleum Association annual meeting, Shangri-La Resort, Afton, Okla.
- 5-7 American Gas Association transmission conference, Hotel Utah, Salt Lake City, Utah.
- 5-8 Society of Plastics Engineers annual technical conference, New York Hilton, New York.
- 5-8 Offshore Technology Conference, Houston.
- 6-8 Western States Corrosion Seminar, California Polytechnic University, Kellogg West, Pomona, Calif. Sponsor: Western region of National Association of Corrosion Engineers.
- 7-8 NPEA national industrial and labor relations meeting, Marriott Hotel, Dallas.
- 7-9 Canadian Society of Exploration Geophysicists convention, Calgary, Alta.
- 11-13 Independent Petroleum Association of America midyear meeting, Fairmont Hotel, Denver.
- 11-14 API tanker conference, Hotel del Coronado, Coronado, Calif.
- 12-15 National LPG Association convention and exhibition, MGM Grand Hotel, Las Vegas, Nev.
- 12-15 API refining department midyear meeting, Hyatt Regency Hotel, Houston.
- 13 International Association of Geophysical Contractors annual meeting, Hilton Southwest Hotel, Houston.
- 13-15 Eastern gas compression roundtable, College of Mineral and Energy Re-

OIL & GAS JOURNAL — MAR. 3, 1980

corrosion. Not only does it resist solutions like hydrocarbons, brines, alkalis and fertilizer, the FDA and I proved Trico-Bond 478 as a non-coating suitable for the storage of paint. Trico creates a totally corrosion-free first blasting all tank components to coats of Trico-Bond 478 are then applied surfaces while the outside is primed and finished with an attractive acrylic coat is baked in a high-temperature crosslink the coatings. But we don't For instance, what good is even corrosion is allowed to gnaw away interior nuts and bolts are polypropylene, the coating extends under the keys, and special sealants and not



If you've just drilled into a river at 2,000 feet, talk to Halliburton.

You'll want to talk about our Flo-Chek service, developed specifically to help stop huge flows of brine.

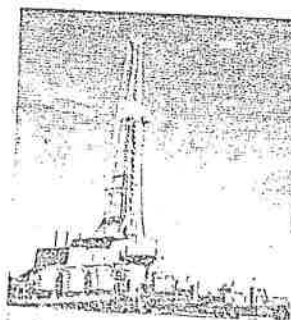
Or, if you're in a thief formation that's sucking up mud faster than you can mix it, you'll want to talk to us about one of our downhole fluid control systems developed to help you regain circulation by plugging the thief formation.

In fact, there's a Halliburton downhole fluid control system for almost any combination of downhole conditions. Each system has been thoroughly tested and proven effective in the field.

The most spectacular system is the unique Flo-Chek service which has successfully stopped brine flows estimated to be as high as 2,000 BWPD. The Flo-Chek service is run in two stages. The first stage forms an extremely stiff gel instantly on contact with brine to temporarily stop flow. The second stage, an accelerated cement slurry, then is run to form the permanent seal. The Flo-Chek service has

stopped heavy water flows in many wells where conventional water control treatments failed. (If the problem is a high volume fresh water flow, a pad of brine can be pumped ahead of the first stage Flo-Chek material to help set the initial gel.)

In lost circulation zones, Halliburton's Bengum® squeeze service provides a method of quickly sealing off to help prevent further fluid loss. The sealant is compatible with most mud systems. It thickens when contacted by fresh water or any known water-based drilling fluid. The material is easy to place, is stable at high temperatures, and is economical to use.



Halliburton Gunk Squeeze also is ideal for lost circulation zones. It can be mixed with drilling fluid on short notice. The result is a putty-like material designed to flow into and plug

the thief zone. Usually, only low volumes give big results.

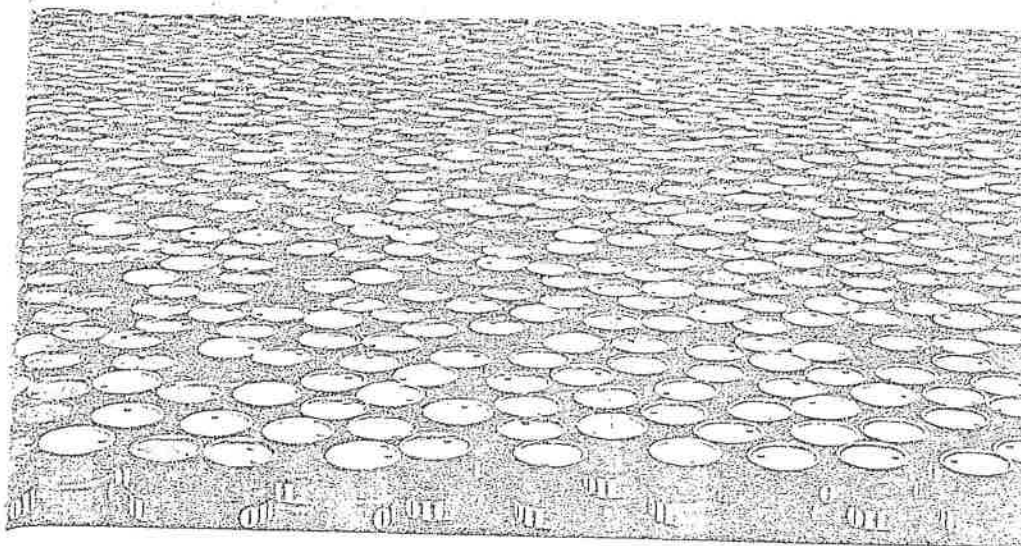
The features of the Halliburton DOC service make it right for a variety of requirements—shutting off bottom water, lost circulation control, and plugging flow channels behind pipe. It sets only on contact with water. That makes it easy to produce back any excess material that finds its way into oil bearing zones.

Halliburton offers a variety of other downhole fluid control systems for drilling, producing, and injection wells. To help you select the right system and materials for your well, Halliburton can make a thorough analysis of treatment parameters either in one of our fully equipped field laboratories or in our Duncan, Oklahoma R&D labs.

The net result—whether you've drilled into an underground river that seems to rival the Mississippi in flow rate or have a more conventional fluid control problem—is that you can count on your Halliburton representative to help develop a solution. Contact him anytime.



HOW MAGCOBRINE WENT INTO AN OIL FIELD AND BEAT THE AVERAGE DAILY PRODUCTION OF 200 BARRELS. BY 1,500 BARRELS.



Magcobrine systems are dramatically increasing the yield on well completions the world over.

Recently, in a field in High Island, Gulf of Mexico, our brines system increased the average daily production from 200 barrels to 1,700 barrels per well. Gas production increased from 2 million to 20 million cubic feet per day.

In addition to increasing oil and gas production, we saved one-third of the total completion fluids cost.

BRINES ARE CLEARLY BETTER.

Specialized completion fluids are undoubtedly better than conventional workover, completion and packer fluids. Why?

Because clear, solids-free brine systems contain no particles which can impair the formation.

As a result, formation damage is minimized so the field yields more for a longer period of time.

WHY MAGCOBRINE BRINES?

Magcobrine offers you a comprehensive

line of completion fluids, plus a complete line of additives.

In addition, we offer brines from 8.34 to 19.2 pounds per gallon, as well as acid-soluble water- and oil-base systems.

You can count on us to deliver our brines when you need them because we have more distribution centers than anyone else.

IT TAKES MORE THAN BRINES.

Brines alone will not give you maximum production.

It also takes the knowledge to formulate the right brines systems.

That's where we shine.

Our engineers have to graduate from a tough school that specializes in workover, completion and packer fluid systems.

That's one reason our completion fluids engineers can assist you in creating and executing a successfully planned completion program.

THE BRAINS BEHIND OUR BRINES.

We back up our completion fluids

engineers with one of the most advanced fluids research departments in the world.

We also back them up with a group dedicated to designing and testing completion fluids systems to meet tomorrow's hydrocarbon demands.

We do these things because it's our responsibility to know everything there is to know about workover, completion and packer fluids. Today...and tomorrow.

Shouldn't you put all this knowledge to work for you?



OUR KNOWLEDGE RUNS DEEP IN WORKOVER AND COMPLETION FLUIDS.



Magcobrine Division, Dresser Industries, P.O. Box 6204, Houston, Texas 77005

Circle 508 on Reader Service Card

RESOURCE MANAGEMENT AGENCY
county of ventura

Planning Division

Dennis Davis, AICP
Manager

June 18, 1980

Mr. Earl Loughboro
812 La Luna
Ojai, California 93023

Dear Mr. Loughboro:

Subject: RESPONSE TO YOUR COMMENTS REGARDING THE EIR UPDATE FOR
CONDITIONAL USE PERMIT NO. CUP-3543 (PHOENIX WEST OIL
DEVELOPMENT - KOENIGSTEIN ROAD, UPPER OJAI VALLEY)

The purpose of this letter is to respond to your letter of May 7, 1980 regarding the adequacy of the draft EIR Update for the subject project. A copy of your letter and this response will appear in the final EIR Update. That final report will be submitted to the Board of Supervisors next Tuesday, June 24, 1980, for their certification of its conformance with the State EIR Guidelines and the California Environmental Quality Act. For more information on the purpose of the Board of Supervisor's June 24 public hearing, please review pages 1, 2 and 3 of the EIR Update, as well as the legal notice which was previously sent to you regarding the hearing date, time and place. If you have not yet received that legal notice please contact Steve Chase of the Planning Division at (805) 654-2460 for information and assistance.

In preparing this response to your comments, Planning staff discussed your concerns regarding toxic chemicals/hazardous materials used in the drilling processes with numerous entities, including: the California Department of Health - Hazardous Waste Management Section, the State Solid Waste Management Section, the State Division of Oil and Gas, the County Public Works Agency - Groundwater Section and industry representatives from Argo Petroleum and Getty Oil Company. Staff learned from these discussions two important pieces of information which we believe are pertinent to your concerns: a) there is a considerable body of information available about the types of chemical, metal and earthen materials or additives used, however, there is professional disagreement about the degree of hazardous potential or hazardous versus non-hazardous potential that these materials possess; and, b) most of the environmental and public health related concerns about the use of these materials are not focussed upon the oil well site specific impacts, but rather upon where these materials are dumped after their use in the well hole.

Relative to item a) above, please note that the State Department of Health handles all regulatory and enforcement matters pertaining to hazardous/toxic oil field materials. As noted, there is considerable disagreement by the professionals in this field as to what is to be considered as hazardous. Representatives of the oil industry indicated to staff that the majority of oilfield materials which are classed as hazardous, have been categorized as such because of a lack of study by both government and the industry. In a recent meeting between County Planning

800 South Victoria Avenue, Ventura, CA 93009

Mr. Earl Loughboro
812 La Luna

June 18, 1980
Page 2

staff and State Department of Health directors, the State representatives confirmed the oil industries statements on this matter. These State representatives as well as others noted above believe, however, that regardless of the hazardous/non-hazardous nature of the oil field materials, there is little environmental impact caused by the use of these materials in the drilling of wells. Rather, as noted in item b) above, they believe that the concerns should be focussed towards problems associated with oilfield waste disposal in dumps located elsewhere in the County. For example, government and industry experts do not consider cement setting additives to be a problem to the environment because the chemical additives are held within the cement compounds, the jelling or binding properties of the cement minimize migration, and the additives used are in relatively small amounts. The use of some types of drilling muds may pose some environmental and public health related problems, however because the muds are circulated through the boring or well hole and collected at the surface for disposal elsewhere, the problems arise at the dump sites and not the well sites. Lastly, all parties contacted confirmed that groundwater zones and supplies are adequately protected by the use of cemented casings and blow-out equipment.

Your letter also discussed problems associated with circulation loss fluids. Staff learned that such fluids are absorbant materials and non-hazardous, including cotton seed husks, walnut husks, cellulose materials, micas, etc. Furthermore, after light heartedly inquiring about the material you termed as "panther piss" staff learned from the State Division of Oil and Gas that it is believed that the material is calcium chloride, which is no longer used in the oil field. Calcium chloride is non-hazardous and is found in high concentrations in hard drinking water. None of the other sources checked have ever heard of the term which you described.

In closing, if you are interested in the County's efforts in studying potential problems at existing and proposed oil field dumps (none of which are located in the Ojai area), please contact Steve Chase of the Planning Division at (805) 654-2460.

Sincerely,

RESOURCE MANAGEMENT AGENCY


DENNIS T. DAVIS, AICP
Manager, Planning Division

DTD:bn

Mr. Earl Loughboro
812 La Luna

June 18, 1980
Page 2

staff and State Department of Health directors, the State representatives confirmed the oil industries statements on this matter. These State representatives as well as others noted above believe, however, that regardless of the hazardous/non-hazardous nature of the oil field materials, there is little environmental impact caused by the use of these materials in the drilling of wells. Rather, as noted in item b) above, they believe that the concerns should be focussed towards problems associated with oilfield waste disposal in dumps located elsewhere in the County. For example, government and industry experts do not consider cement setting additives to be a problem to the environment because the chemical additives are held within the cement compounds, the jelling or binding properties of the cement minimize migration, and the additives used are in relatively small amounts. The use of some types of drilling muds may pose some environmental and public health related problems, however because the muds are circulated through the boring or well hole and collected at the surface for disposal elsewhere, the problems arise at the dump sites and not the well sites. Lastly, all parties contacted confirmed that groundwater zones and supplies are adequately protected by the use of cemented casings and blow-out equipment.

Your letter also discussed problems associated with circulation loss fluids. Staff learned that such fluids are absorbant materials and non-hazardous, including cotton seed husks, walnut husks, cellulose materials, micas, etc. Furthermore, after light heartedly inquiring about the material you termed as "panther piss" staff learned from the State Division of Oil and Gas that it is believed that the material is calcium chloride, which is no longer used in the oil field. Calcium chloride is non-hazardous and is found in high concentrations in hard drinking water. None of the other sources checked have ever heard of the term which you described.

In closing, if you are interested in the County's efforts in studying potential problems at existing and proposed oil field dumps (none of which are located in the Ojai area), please contact Steve Chase of the Planning Division at (805) 654-2460.

Sincerely,

RESOURCE MANAGEMENT AGENCY


DENNIS T. DAVIS, AICP
Manager, Planning Division

DTD:bn

State of California

The Resources Agency of California

Memorandum

Date : APR 16 1980

To : Mr. James Burns
Projects Coordinator
Resources Agency

Robert K. Loughlin, Supervisor
Subdivision and Environmental Review
Section
Ventura County Resource Management Agency
800 South Victoria
Ventura CA 93009

From : Department of Parks and Recreation

Subject: SCH # 80040913-DEIR for Conditional Use Permit 3543, Phoenix West Oil
and Gas Company, Ventura County

The Office of Historic Preservation has reviewed the Draft Environmental Impact Report prepared for the undertaking referenced above.

According to the study, no archeological sites have been previously recorded for the project area; however, the area is highly sensitive archeologically. You may not be aware, but projects assisted by federal funding or licensed by federal permits must comply with the National Historic Preservation Act of 1966. This means that any properties possessing archeological, historical, architectural or cultural values within the project's area of potential environmental impact must be identified and assessed for possible inclusion in the National Register of Historic Places. The assessment should be conducted prior to issuance of the federal permit, in order that the impact mitigation measures for any identified resources can be incorporated as part of the planning process.

A copy of this cultural resource documentation should be submitted to this Office so that we may complete our portion of the required review process.

If you should have any questions or concerns in this matter, please feel free to contact Daniel Bell, of my staff, at (916) 322-8702.

Original Signed by
Dr. Knox Mellon
Dr. Knox Mellon
State Historic Preservation Officer
Office of Historic Preservation

RESOURCE MANAGEMENT AGENCY
County of Ventura

Planning Division

Dennis Davis, AICP
Manager

June 16, 1980

Dr. Knox Mellon
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
P.O. Box 2390
1220 "K" Street, 3rd Floor
Sacramento, CA 95811

Dear Dr. Mellon:

Subject: Response to Your Comments Regarding the EIR Update for
Conditional Use Permit No. CUP-3543 (SCH#80040913,
Phoenix West Oil and Gas Co.)

Thank you for providing us with your memorandum of April 16,
1980, regarding the cultural resources of the project site. No
Federal permits are required for this project; therefore,
exempting the project from the National Historic Preservation
Act of 1966.

Sincerely,

RESOURCE MANAGEMENT AGENCY


Robert K. Laughlin, Supervisor
Subdivision & Environmental Review Section

RKL:SC:dv/977

cc: State Clearinghouse

800 South Victoria Avenue, Ventura, CA 93009

County of Ventura
PLANNING DIVISION
MEMORANDUM

To: EIR Update for CUP-3543 Date: June 11, 1980
From: Robert K. Laughlin, Supervisor (RL)
Subdivision & Environmental Review Section Reference No.: _____
Subject: Comments Regarding the EIR Update

Responses to comment are not required for the following correspondence:

1. Letter from Theodore Off of May 15, 1980;
2. Letter from Ralph C. Hansen of April 18, 1980;
3. Letter from Norman Arno of the U.S. Army Corps of Engineers of May 19, 1980; and
4. Letter from Allan H. Hendrix of Caltrans of May 12, 1980.

RKL:SC:dv/059

PAOF-B9A

THEODORE OFF

GEOLOGIST

2365 EAST MAIN STREET
VENTURA, CALIFORNIA 93003
(805) 643-8641
1-800-499-7349

May 15, 1980

Resource Management Agency
County of Ventura
800 South Victoria Ave.
Ventura, CA 93009

Attention: Steve Chase

Re: CUP-3543 (Phoenix West Oil and Gas Company - Koenigstein Road)

Gentlemen:

As you know, the above CUP and the assets covered by it belong to Bear Canyon Venture (a partnership). Phoenix West Oil and Gas Company was operator for this partnership. In August, 1978, I was appointed by the Superior Court of Ventura County as Receiver to manage these assets for the Court. That is, effectively I took the place of Phoenix West Oil and Gas Corporation. As such Receiver, I have been responsible for all work with you on the CUP and underlying EIR.

Bear Canyon Venture is now in reorganization under Chapter 11 of the U. S. Bankruptcy Code. A trustee has been appointed and I have turned over all assets to him. He is:

Lawrence A. Diamant
Robinson & Wolas
1888 Century Park East, Suite 900
Los Angeles, CA 90067
Phone: (213) 277-7400

However, at present, I am acting as his agent and will represent him in all matters concerning CUP-3543. Furthermore, as I understand, the law firm of Loeb & Parker (formerly Loeb, Briggold, Peck & Parker) will continue to represent Bear Canyon Venture in all matters concerning this CUP.

Very Truly Yours,



Copy to: Lawrence A. Diamant
Donald Wagner

Resource Management Agency
Planning Division
800 S. Victoria Ave.
Ventura, Ca. 93009

April 18, 1980

Dear Sir,

This letter is in regards to the Phoenix West EIR. I personally cannot see why any form of EIR should be invoked in this lease. Since surface & mineral rights belong to the same person, the EIR should not have been required. It is just a great expense for nothing more than to please some new comers in this valley. They seem to want to change everything here to suite themselves.

Oil was developed not far from this property when the Indians still lived in this valley. It has continued since then without any great problem.

I believe you have caused undue hardship on these people. Therefore, please approve their permits and let them get on with the operations.

Land sales, developments and sale of illegal subdivisions go on just across HWY 150 from this property. Were these developers required to have an EIR or Grading permits for the roads they are slicing thru Sulpher Mountain to reach the top, thus making more land available for more illegal sales?

Sincerely,

Ralph C. Hansen
Ralph C. Hansen



DEPARTMENT OF THE ARMY
LOS ANGELES DISTRICT, CORPS OF ENGINEERS
P. O. BOX 2711
LOS ANGELES, CALIFORNIA 90053

SPLED-E

19 May 1980

Mr. Robert K. Laughlin, Supervisor
Subdivision & Environmental Review Section
Ventura County
Resource Management Agency
800 South Victoria Avenue
Ventura, California 93009

Dear Mr. Laughlin:

This is in response to a letter from your office which requested review and comments on the Draft Environmental Impact Report (DEIR) for Conditional Use Permit 3543, Phoenix West Oil and Gas Company.

The proposed plan does not conflict with existing or authorized plans of the Corps of Engineers. We have no comments on the DEIR.

Thank you for the opportunity to review and comment on this document.

Sincerely,

Carl R. Arnold, LTC, CE
for NORMAN ARNO
Chief, Engineering Division

RECEIVED
JAN 23 1981
ENGINEERING

DEPARTMENT OF TRANSPORTATION

DISTRICT 7, P.O. BOX 2304, LOS ANGELES 90051

(213) 620-5335



May 12, 1980

File: Ventura County
Phoenix West Oil
and Gas Company

Mr. Robert K. Laughlin
Supervisor
Subdivision and Environmental
Review Section
Resource Management Agency
800 South Victoria Avenue
Ventura, CA 93009

Dear Mr. Laughlin:

Our only comments on the Draft Environmental Impact Report for Conditional Use Permit 3543, Phoenix West Oil and Gas Company, concern transportation permits. If the non-reducible height, length, width or weight for the large trucks needed at the project site exceed the legal standards and these loads must use a State Highway, transportation permits shall be required from Caltrans. Pilot cars and flagmen may be a condition of the permits.

Yours truly,

A handwritten signature in cursive script, appearing to read 'Allan H. Hendrix'.

ALLAN H. HENDRIX, Chief
Environmental Planning Branch

County of Ventura
RESOURCE MANAGEMENT AGENCY

MEMORANDUM

To: EIR Update for CUP-3543
Robert K. Laughlin, Supervisor (RKL:db)
From: Subdivision and Environ. Review Section
Subject: Comments Regarding the EIR Update

Date: June 17, 1980

Reference No.: _____

A response to comment is not required for the May 22, 1980
memorandum from the California Department of Fish and Game.

RKL:db

PAOF-89A

State of California

The Resources Agency

Memorandum

To : 1. Jim Burns, Projects Coordinator
Resources Agency

2. County of Ventura
Resource Management Agency
800 S. Victoria
Ventura, CA 93009

Date: May 22, 1980

From : Department of Fish and Game

Subject: SCH 80040913 - DEIR Phoenix West Oil & Gas Company, CUP 3543

We have reviewed the subject document and have no objection to the proposed oil drilling project if the proposed mitigation measures for controlling soil erosion and sedimentation of nearby Bear Creek and Sisar Creek drainage are fully implemented. We also endorse the idea that a task force be created to recommend means for minimizing the impact on wildlife and wildlife habitat from present and future oil operations in the Upper Ojai Valley.

The project sponsor should be advised that the alteration of any streambed within the high water mark will require notification to the Department of Fish and Game pursuant to Section 1603 of the Fish and Game Code. This notification and the subsequent agreement must be completed prior to commencement of the streambed alteration.

Thank you for the opportunity to review and comment on this document. If you have any questions, please contact Mr. Fred A. Worthley Jr., Regional Manager of Region 5, at 350 Golden Shore, Long Beach, CA 90802. The telephone number is (213) 590-5113.

Director

VENTURA COUNTY
PLANNING COMMISSION
800 SOUTH VICTORIA AVENUE
VENTURA, CALIFORNIA 93009

Meeting of November 17, 1983

After due investigation and legal notification by the Planning Director and pursuant to the Ventura County Ordinance Code, the Planning Commission resolves as follows:


1. RESOLUTION 83-39. RESOLVED, that the proposed staff findings contained in the staff report be adopted and that Appeal No. 153, filed by Thomas Aquinas College, requesting that the Planning Commission overturn a decision by the Planning Director to extend a waiver of Condition No. 3 of Conditional Use Permit No. CUP-3344 which requires that all oil produced on the Ferndale Ranch be transported off-site by pipeline be DENIED. The subject property consists of 791 acres, located within the Ferndale Ranch, lying north of State Highway 150, in the Santa Paula Canyon area, approximately three miles north of the City of Santa Paula (Assessor's Parcel Nos. 40-060-05 and -15).

Based upon the information and findings set forth in the Staff Testimony and Proposed Findings contained in the Staff Report, it is determined that environmental impacts more significant than those caused by the waiver would result if the Appeal were granted and that those caused by the waiver can be made negligible.

2. RESOLUTION 83-40. RESOLVED, that the Environmental Impact Report be certified, that the proposed staff findings contained in the staff report be adopted and that Modification No. 4 to Conditional Use Permit No. CUP-3543, filed by Ag-oil, Incorporated, Portland, Oregon, requesting approval to extend the deadline for drilling three previously approved oil and gas wells and to modify a condition relating to removal of temporary oil production tanks on a permit area which is a portion of a 144.5 acre parcel located approximately three-quarters of a mile northeast of the community of Summit, about two hundred feet northwest of Koenigstein Road in the Upper Ojai Valley (Assessor's Parcel No. 40-01-52) be APPROVED.

Based upon the information and findings set forth in the Staff Testimony and Proposed Findings contained in the Staff Report, it is determined that this application with the attached conditions meets the requirements of Ventura County Ordinance Code Section 8111-2.1 in that the proposed use is compatible with existing and future land uses, will not become obnoxious or harmful to adjacent properties, will not impair the integrity and character of the subject zone, and will not be detrimental to the public interest, health, safety, convenience, or the general welfare.

This is to verify that the foregoing is a full, true and correct copy of the resolutions of said meeting.


Dennis T. Davis, AICP
Manager, Planning Division

NOTE: Ordinance Code Section 8111-6.3 - Finality of Decision - A decision of the Planning Commission shall become final and conclusive at the expiration of ten (10) calendar days after the day of its

Planning Commission Resolutions
November 17, 1983
Page Two

rendition unless prior to the expiration of said period an appeal in proper form is duly filed with the Board of Supervisors. The filing of such appeal shall automatically stay all proceedings in furtherance of the permit or variance or the modification thereof. Neither the applicant nor any enforcement agency may rely on such variance or permit or such modification or revocation thereof until the expiration of ten (10) calendar days after the day of its rendition or until the appeal has been resolved.

cc: Appellant
Applicant
Regional Water Quality Control Board
County Fire Prevention Bureau
County Counsel
County Public Works Agency (3)
County Environmental Health Division (2)
County Building and Safety Division
Property Administration Agency
County Schools
County Assessor

CONDITIONS FOR: CUP-3543 MOD #4

APPLICANT: Agoil, Inc.

RESOLUTION NO.: 83-40

PAGE: Three

DATE: November 17, 1983

PLANNING DIVISION

1. Permitted Uses

That the permit is modified to permit the drilling, testing, production, reworking and maintenance of three additional oil and gas well(s) for a total of six (6) wells, and the employment of production and transporting operations, facilities, equipment and other appurtenances accessory thereto as described on Plot Plan "A", and located on permit area described on Plot Plan "B".

The only processing operations permitted at the well site are the separation of produced water and natural gas from crude oil and those processing operations required for injection purposes and for the transportation of production products from the site, unless otherwise required by the California State Division of Oil and Gas.

2. Time Limit

That the permit is granted for a period of thirty (30) years ending November 17, 2013. Further drilling operations shall not commence until a Zoning Clearance is granted. Drilling of all approved wells must be completed in a timely manner ending within three (3) years of the granting of CUP-3543 MOD #4. Any redrilling of an existing well requires a modification of the permit pursuant to Condition 6.

The permit shall become null and void if all the permitted wells have been abandoned pursuant to DOG requirements.

3. Permit Renewal

That upon the filing of a renewal application 18 months prior to the expiration of the permit, the permit shall continue in force until the request is acted upon and all administrative appeals are heard even though the permit being renewed has expired. The permittee/operator of record is solely responsible for the timely renewal of this permit. Failure of the County to notify said parties of the permit's imminent expiration shall not be grounds for the uses continued operation after the expiration of the permit.

4. Issuance of Zoning Clearance

That prior to issuance of a Zoning Clearance for further drilling, the permittee shall submit to the Planning Director, together at one time, written documentation that the provisions of the following conditions have been complied with: 5, 7, 8, 9, 15, 16, 19, 22, 26, 32, and 48.

5. Other Permit Clearances

That the Planning Director shall be furnished the conditions and a written clearance from all applicable permitting agencies that the permittee has complied with all applicable conditions of their respective permits. These permits include: Uniform Fire Permit, Authority to Construct Permit, Permit to Operate.

6. Proposed Permit Modifications

That all facilities and uses other than those specifically identified in the conditions of the permit are prohibited until and unless they have been authorized by the Planning Director or Planning Commission. All proposed changes to the conditions of this permit, or the existing proposed uses, facilities, structures or improvements (including construction of pipelines to and from the site) shall be presented in written and mapped form to the Planning Director who shall determine what type of permits, if any, the proposal will necessitate. The Planning Director may grant a modification to allow for time extensions to deadlines herein referenced, if the permittee can demonstrate that he has diligently attempted to meet the deadline specified. Modifications may also be granted by the Planning Director for the re-drilling of existing wells or additional time beyond

that allowed in Condition 2 to complete all permitted drilling if there would be no significant change in the approved plot plans and if there has been no significant changes in the land use of adjacent areas. No permit shall be required for the maintenance and normal operations of existing facilities.

7. Maintaining Current Exhibits

That unless already provided with the application, the permittee shall furnish the County, in a form approved by County staff, one copy of all the most current exhibits and plot plans which reflect the conditions, provisions, and terms associated with the permit as finally approved. Within 30 days of any subsequent modification of the permit, revised exhibits and plot plans shall be submitted to the Planning Director.

8. Contact Person

That the permittee shall provide the Planning Director with the current name and/or position title, address, and phone number of the permittee's field agent and other representatives who shall receive all orders and notices as well as all communications regarding matters of condition and code compliance at the permit site. There shall always be such a contact person(s) designated by the permittee. One contact person(s) shall be available 24 hours a day during drilling phase of the project to respond to noise complaints by citizens and the County. If the address or phone number of the permittee's agents should change, or the responsibility be assigned to another person or position, the permittee shall provide the Planning Director with the new information within 30 days.

9. Notice of Permit Requirements

That unless otherwise required by the Planning Director, the permittee shall provide copies of the conditions applicable to the permit to the surface owner of record, the drilling contractor and all other parties and vendors dealing with the daily operation of the proposed drilling activities. Furthermore, a current set of permit conditions shall be posted at the drill site during drilling for use by persons participating in the drilling of said well(s).

10. Change of Ownership Notice

That no later than ten days after the permittee has been notified of any change of property ownership or of lessee(s) or operator(s) of the subject use, there shall be filed with the Planning Director the name(s) and address(es) of the new owner(s), lessee(s) or operator(s), together with a letter from any such person(s) acknowledging and agreeing to comply with all conditions of this permit. Furthermore, amendments and updates of all the applicable materials required pursuant to Condition Nos. 8, 9, 15, 16, 19, 22 shall also be submitted at the same time.

11. Permittee Defense Costs

That the permittee agrees as a condition of issuance (or renewal) and use of this permit to defend at his sole expense any action brought against the County because of issuance or (renewal) of this permit or, in the alternative, to relinquish this permit. Upon demand from the County, permittee will reimburse the County for any court costs and/or attorney's fees which the County may be required by a court to pay as a result of any such action. County may, at its sole discretion, participate in the defense of any such action, but such participation shall not relieve permittee of his obligations under this condition.

12. Acceptance of Conditions

That the permittee's acceptance of this permit and/or commencement of construction and/or operations under this permit shall be deemed to be acceptance by permittee of all conditions of this permit.

CONDITIONS FOR: CUP-3543 MOD #4

APPLICANT: Agoil, Inc.

RESOLUTION NO.: 83-40

PAGE: Five

DATE: November 17, 1983

13. Other Responsibilities

That neither the issuance of a use permit hereunder nor compliance with the conditions thereof shall relieve an operator from any responsibility otherwise imposed by law for damage to persons or property, nor shall the issuance of any use permit hereunder serve to impose any liability upon the County of Ventura, its officers or employees for injury or damage to persons or property.

14. Other Permit Requirements

That pursuant to Section 8107-5.4, no condition of a Conditional Use Permit for uses allowed by this Chapter shall be interpreted as permitting or requiring any violation of law, or any lawful rules or regulations or orders of an authorized governmental agency. In instances where more than one set of rules apply, the stricter ones shall take precedence.

15. Insurance

That pursuant to Sec. 8107-5.6.12, the permittee shall maintain, for the life of the permit, liability insurance of not less than \$1,250,000 for one person, \$2,500,000 for all persons, and \$5,000,000 for property damage. This requirement shall not preclude the permittee from being self-insured.

16. Penal Securities

That pursuant to Sec. 8107-5.6.3, the permittee shall file, in a form acceptable to the County Counsel and certified by the County Clerk, a bond or other security in the penal amount of \$10,000.00 for each well that is drilled or to be drilled. Any operator may, in lieu of filing such security for each well drilled, redrilled, produced or maintained, file a security in the penal amount of \$20,000.00 to cover all operations conducted in the County of Ventura, a political subdivision of the State of California, conditioned upon the permittee well and truly obeying, fulfilling and performing each and every term and provision in the permit. In case of any failure by the permittee to perform or comply with any term or provision thereof, the Planning Commission may, after notice to the permittee and a public hearing, by resolution, determine the amount of the penalty and declare all or part of the security forfeited in accordance with its provisions. The sureties and principal will be jointly and severally obligated to pay forthwith the full amount of the forfeiture to the County of Ventura. The forfeiture of any security shall not insulate the permittee from liability in excess of the sum of the security for damages or injury or expense or liability suffered by the County of Ventura from any breach of permittee of any term or condition of said permit or of any applicable ordinance or of this security. No security shall be exonerated until after all the applicable conditions of the permit have been met.

17. Reporting Accidents

That pursuant to Sec. 8105-5.6.8, the permittee shall immediately notify the Planning Director, Fire Department, and all other applicable agencies in the event of fires, spills or hazardous conditions not incidental to the normal operations at the permit site. Upon request of any County Agency, the permittee shall provide a written report of any incident within seven calendar days which shall include, but not be limited to, a description of the facts of the incident, the corrective measures used, and the steps taken to prevent a recurrence of the incident. This condition does not supersede nor replace any requirement of any other governmental entity for reporting incidents as described above.

18. Suspension of Use

That pursuant to Sec. 8111-9, the Planning Director may suspend, following a duly noticed hearing, all or portions of the permittee's operations until such time as the violation(s) in question is (are) corrected. If the suspension of well operations is ordered by the Planning Director it shall only occur after consulting with the Division of Oil and Gas about the

CONDITIONS FOR: CUP-3543 MOD #4

APPLICANT: Agoil, Inc.

RESOLUTION NO.: 83-40

PAGE: Six

DATE: November 17, 1983

implications of such a suspension. Approval of any other County permits requested by permittee relating to the subject project may also be withheld until the violation(s) in question is (are) corrected.

19. Inspection and Enforcement

That pursuant to Sec. 8114-4.4, the permittee shall bear the full costs incurred by the County or its consultant for the review of materials submitted for monitoring and enforcement activities related to resolution of confirmed violations. The permittee shall also bear the full costs incurred by the County for inspections of the project during the following phases of the project: drilling, production, and periodic reviews pursuant to Condition No. 44.

To ensure that the funds are available for the legitimate and anticipated costs incurred for such inspections, the permittee shall deposit \$500.00 with the County prior to the issuance of a Zoning Clearance. The funds shall also cover the costs for any other necessary inspections or the resolution of confirmed violations that may occur. Once the project is in the production phase, the required deposit fee may be eliminated or reduced by the Planning Director to an amount commensurate with the anticipated costs of monitoring and enforcing the permit. One deposit may be made to cover all of the permittee's various permits.

Upon receiving notice from the County that the required deposit fee is below the required level or that the County is to be reimbursed for its costs associated with the permit, the permittee shall have 30 days to bring the deposit fee up to the required level or pay the costs billed to him. Such notice shall be accompanied by an accounting of how deposited funds have been spent. Failure to pay the required bill or maintain the required deposit fee balance shall be grounds for suspension or revocation of the permit.

Prior to the County engaging any independent consultants or contractors pursuant to this condition, the County shall confer with the permittee over the work to be contracted for and the costs of such work, and receive the approval of the Board of Supervisors. Unless otherwise required, the permittee may waive the requirement of Board approval. Whenever feasible, the lowest bidder will be used. The permittee may hire private consultants to undertake work required by the County provided the consultant and the proposed scope of work are acceptable to the County.

20. Setbacks

That pursuant to Sec. 8107-5.6.1, no well shall be drilled and no equipment or facilities shall be permanently located within:

- a) 100 feet of any dedicated public street, highway or nearest rail of a railway being used as such, unless the new well is located on an existing drill site and the new well would not permit a safety or right of way problem.
- b) 500 feet of any building not necessary to the operation of the well.
- c) 500 feet of any building used as a place of public assembly, institution, or school.
- d) 300 feet of all streams or channels in the vicinity of the project.
- e) The applicable setbacks for accessory structures for the zone in which the use is located.
- f) 100 feet from any spring appearing on the most current USGS 2000' scale topographic map.

CONDITIONS FOR: CUP-3543 MOD #4

APPLICANT: Agoil, Inc.

RESOLUTION NO.: 83-40

PAGE: Seven

DATE: November 17, 1983

21. Removal of Equipment

That pursuant to Sec. 8107-5.6.3, all equipment used for drilling, redrilling, or maintenance work on approved wells shall be removed from the site within 30 days of the completion of such work unless a time extension is approved by the Planning Director.

22. Containment of Contaminants

That pursuant to Sec. 8107-5.6.4, oil, produced water, drilling fluids, cuttings, and other contaminants associated with the drilling, production, storage, and transport of oil shall be contained on the site unless properly transported off-site or injected into a well. The permittee shall furnish the Planning Director a plan for controlling oil spillage and preventing saline or other polluting or contaminating substances from reaching surface or subsurface waters. The plan shall be consistent with the requirements of the County, State, and Federal Government.

23. Waste Storage

That unless otherwise advised by the applicable State Agencies, rotary mud, produced water, drill cuttings, or liquid hydrocarbons, and all other oil field wastes derived or resulting from, or connected with, the drilling or reworking of any well shall be discharged into portable watertight receptors. All waste materials shall be completely removed from the drill site within 30 days after completion of drilling or maintenance of a well and disposed of in an approved manner. This shall not preclude the injection of water into a well and attendant storage tanks for such injection.

24. Dust Prevention

That pursuant to Sec. 8107-5.6.6, the drill site and all roads or hauling routes located between the public right-of-way and the subject site shall be improved or otherwise treated as required by the County and maintained as necessary to prevent the emanation of dust.

25. Light Emanation

That pursuant to Sec. 8107-5.6.7, light emanation shall be controlled so as not to produce excessive levels of glare or abnormal light levels directed at any neighboring uses. Lighting shall be kept to a minimum to maintain the normal night-time light levels in the area.

26. Painting

That pursuant to Sec. 8107-5.6.9, all permanent facilities, structures, and aboveground pipelines shall be colored so as to mask the facilities from the surrounding environment and uses in the area. Said colors shall also take into account such additional factors as heat buildup and designation of danger areas. The approved color shall be "union mulberry" as approved by the Planning Commission.

27. Site Maintenance

That pursuant to Sec. 8107-5.6.10, the permit area shall be maintained in a neat and orderly manner so as not to create any hazardous or unsightly conditions such as debris, pools of oil, water or other liquids, weeds, brush, and trash. Equipment and materials may be stored on the site which are appurtenant to the operation and maintenance of the oil well located thereon. If the well has been suspended, idled or shut in for 30 days, as determined by the Division of Oil and Gas, all such equipment and materials shall be removed within 90 days.

CONDITIONS FOR: CUP-3543 MOD #4

APPLICANT: Agoil, Inc.

RESOLUTION NO.: 83-40

PAGE: Eight

DATE: November 17, 1983

28. Site Restoration

That pursuant to Sec. 8107-5.6.11, within 90 days of revocation, expiration, surrender of any permit, or abandonment of the use, the permittee shall restore and revegetate the premises to its original condition as nearly as is practicable, unless otherwise requested by the landowner.

29. Signs

That no additional signs shall be constructed, erected, or maintained on the property encompassed by this permit except those required by law or allowed by the County Ordinance Code. Wells shall be marked in a conspicuous place with the name of the operator and other pertinent identification material as necessary. This marker shall be maintained at all times. Directional signs (maximum size four square feet) may be erected along the access route to the drill site subject to the approval of the Planning Director.

30. Shipping Tanks

That any production shipping tank(s) installed on the subject permit site shall have a collective rated capacity of not more than 3,000 barrels per site and said tank(s) and appurtenances shall be painted in accordance with the paint scheme approved by the Planning Director within 30 days of erection of said tanks. Said tanks shall be kept painted and maintained in good condition at all times.

31. Tanker Trucks

All tanker trucking shall be limited to Monday through Saturday, between the hours of 7:30 a.m. and 6:30 p.m. of the same day. Except under emergency circumstances, as determined by the Planning Director, no more than 12 tanker trucks per week shall be permitted to haul oil and waste products generated from the permit area.

32. Landscape Plan

That prior to the issuance of a Zoning Clearance for further drilling, the site shall be landscaped so as to screen production equipment from view of Highway 150, Koenigstein Road and nearby residences in a manner consistent with the natural character of the area. Such landscaping shall be designed to accomplish the required screening in a minimum amount of time. To comply with this intent it is understood that some 10 and 15 gallon trees and shrubs may be required to achieve the required screening. The Plans for said work shall be prepared in accordance with the County's Landscape Guidelines and shall be submitted to the County for review with the then current landscape review fee. Such plans shall include specifications and a maintenance program and shall be approved by the Planning Director prior to their implementation. Wherever practical, native drought-tolerant materials shall be used for landscaping and revegetation, unless their use would not provide effective and timely screening. Landscape maintenance shall be subject to periodic inspection by the County. The permittee shall be required to remedy any defects in ground maintenance within two weeks of notification by the County.

33. Severability

That if any of the conditions of this permit are held to be invalid, that holding shall not invalidate any of the remaining conditions or limitations set forth.

34. On-Site Quarters

That no one shall reside on the area under permit except those individuals who are required to be on the site 24 hours per day. These individuals include, but are not limited to, the foreman, drilling mud specialist, mud logger, and directional drilling technicians.

CONDITIONS FOR: CUP-3543 MOD #4
RESOLUTION NO.: 83-40
DATE: November 17, 1983

APPLICANT: Agoil, Inc.
PAGE: Nine

35. Noise Standard

That pursuant to Sec. 8107-5.6.13, unless herein exempted, drilling, production, and maintenance operations associated with this permit shall not produce noise, measured at a point outside of occupied sensitive uses such as residences, schools, health care facilities, or places of public assembly, that exceeds the standard listed below.

Nomenclature and noise level descriptors, definitions are in accordance with ANSI Sec. 3.33-1980, "Second Level Descriptors for Determination of Compatible Land Use." Measurement procedures shall be in accordance with the adopted "Noise Measurement Guidelines and Procedures."

The maximum allowable average sound level is as follows:

<u>Time Period</u>	<u>Average Noise Levels (LEQ)</u>	
	<u>Drilling and Maintenance Phase</u>	<u>Production Phase</u>
Day (7:00 a.m. to 7:00 p.m.)	55 dBA	45 dBA
Night (7:00 p.m. to 7:00 a.m.)	45 dBA	40 dBA

Noise from the subject project shall be considered in excess of the standard when the average sound level, measured over one hour, is greater than the standard that follows. A violation of the permittee's applicable noise standard shall have occurred when the average noise level (LEQ), measured in accordance with the adopted "Noise Measurement Guidelines and Procedures," (NMGP) exceeds the applicable noise standard, unless the permittee can demonstrate that the average ambient noise level at the occupied sensitive use in question is within 10 dB of the applicable noise standard as measured in accordance with the NMGP. If this can be demonstrated, a violation will have occurred if the average noise level (LEQ) exceeds the applicable noise standard plus 3dB.

Readings of the average ambient noise level may be taken at the drill site, nearby sensitive uses, and other locations typical to the area prior to the commencement of operations. These measures shall be taken pursuant to the NMGP and shall be used to determine if the 3dB tolerance factor can be used in determining if a noise violation exists at a sensitive use. If ambient noise level readings were not taken at the sensitive use where the alleged violation is occurring, the Planning Director shall decide if the readings taken at other suspected locations are comparable enough to be used.

For purposes of this section, a well is in the "producing phase" when hydrocarbons are being extracted or when the well is idled and not undergoing maintenance. It is presumed that a well is in the "drilling and maintenance phase" when not in the "producing phase."

36. Exceptions to Noise Standard

Pursuant to Sec. 8107-5.6.14, the noise standard established for this permit shall not be exceeded unless exempted under any of the following provisions:

- a. Where the ambient noise levels exceed the applicable noise standard. In such cases, the maximum allowable noise levels shall not exceed the ambient noise levels.
- b. Where the owners/occupants of sensitive uses have signed a waiver pursuant to Sec. 8107-5.6.20 indicating that they are aware that drilling and production operations could exceed the allowable noise standard and that they are willing to experience such noise levels. The applicable noise levels shall apply at all locations where the owners/occupants did not sign such a waiver.

CONDITIONS FOR: CUP-3543 MOD #4
RESOLUTION NO.: 83-40
DATE: November 17, 1983

APPLICANT: Agoil, Inc.
PAGE: Ten

37. Compliance with Noise Standard

Pursuant to Section 8107-5.6.15, when a permittee has been notified by the Planning Division that his operation is in violation of the applicable noise standards, he shall correct the problem as soon as possible in coordination with the Planning Division. In the interim, operations may continue, however the operator shall attempt to minimize the total noise generated at the site by limiting, whenever possible, such activities as the following:

- (a) hammering on pipe;
- (b) racking or making-up of pipe;
- (c) acceleration and deceleration of engines or motors;
- (d) drilling assembly rotational speeds that cause more noise than necessary and could reasonably be reduced by use of a slower rotational speed;
- (e) picking up or laying down drill pipe, casing, tubing or rods into or out of the drill hole.

If the noise problem has not been corrected by 7:00 p.m. of the following day, the offending operations, except for those deemed necessary for safety reasons by the Planning Director upon the advise of the Division of Oil and Gas, shall be suspended until the problem is corrected.

38. Preventive Noise Insulation

That pursuant to 8107-5.6.16, if drilling, redrilling or maintenance operations such as pulling pipe or pumps, are located within 1,600 feet of an occupied sensitive use, the work platform, engine base and draw works, crown block, power sources, pipe rack, and other probable noise sources associated with a drilling or maintenance operation shall be enclosed with soundproofing sufficient to ensure that expected noise levels do not exceed the noise limits applicable to the permit. Such soundproofing shall be installed prior to the commencement of drilling or maintenance activities. The requirements may be waived by the Planning Director if the permittee can demonstrate that the applicable noise standard can be met or that all applicable parties within the prescribed distance have signed a waiver pursuant to Section 8107-5.6.20.

39. Notice to Property Owner and Residents

That ten days prior to commencement of site preparation or drilling, the permittee shall notify in writing the surface owner and all residents on the property that such activities are about to occur. Prior to conducting maintenance activities, the permittee shall notify all the residents on the property, if they can be reached.

40. Hours of Well Maintenance

That pursuant to Sec. 8107-5.6.17, all non-emergency maintenance of a well, such as the pulling of pipe and replacement of pumps, shall be limited to the hours of 7:00 a.m. to 7:00 p.m. of the same day if the well site is located within 3,000 feet of an occupied residence. The requirements may be waived by the Planning Director if the permittee can demonstrate that the applicable noise standard can be met or that all applicable parties within the prescribed distance have signed a waiver pursuant to Sec. 8107-5.6.20.

41. Limited Drilling Hours

That pursuant to Sec. 8107-5.6.18, all drilling activities shall be limited to the hours of 7:00 a.m. through 7:00 p.m. of the same day when they occur less than 800 feet from an occupied sensitive use. Night time drilling shall be permitted if it can be demonstrated to the satisfaction of the Planning Director that the applicable noise standard can be met or that all applicable parties within the prescribed distance have signed a waiver pursuant to Sec. 8107-5.6.20.

CONDITIONS FOR: CUP-3543 MOD #4

APPLICANT: Agoil, Inc.

RESOLUTION NO.: 83-40

PAGE: Eleven

DATE: November 17, 1983

42. Noise Monitoring

That if the County receives a complaint about noise from the permitted operation, the Planning Director may require the permittee to make informal noise measurements in accordance with the adopted Noise Measurement Guidelines and Procedures (NMGP). In addition, the Planning Director may require a formal noise evaluation to be made by a qualified noise expert at the permittee's expense pursuant to Condition 19. The noise evaluation shall be conducted in accordance with the NMGP and in a manner approved by the Planning Director. Until such time as a determination is made regarding the existence of a violation, the operator shall take steps to minimize any on-going noise emanations.

43. Processing of Noise Complaints

The following process shall be used to resolve noise problems related to the project:

- a. All complaints of noise shall be first directed to the permittee's noise contact person established pursuant to Condition 9.
- b. As soon as possible after receiving a complaint from the County or a citizen, but not more than three hours later, the permittee shall cause informal measurements to be taken of the project's noise in accordance with the NMGP.
- c. The permittee shall report his findings to the complainant within three hours unless otherwise agreed to by the parties in question.
- d. If the measurements taken are indicative of a possible violation, the permittee shall take immediate action such as required in Condition 37 to correct the potential problem. The measurements taken informally shall not be sufficient grounds to make an official determination that a violation has occurred.
- e. If the problem persists, a citizen may refer the matter to the County Planning Division through the formal complaint process. When this occurs, the County may require additional informal tests to determine the nature of the problem.
- f. If noise complaints continue despite informal measurements and corrective measurements by the permittee and there is reason to believe the informal measurements are not adequately evaluating the situation, the Planning Director may require a formal noise evaluation to be made at the permittee's expense pursuant to Condition 42.

44. Compatibility Review

That every fifth year the permit shall be reviewed by the Planning Director at the permittee's expense. The permittee shall initiate the review by filing an application for said review and paying the deposit fee then applicable. Said fees shall be no greater than those for a Planning Director approved Conditional Use Permit.

The purpose of the review is to ascertain whether the permit, as conditioned, has remained consistent with its findings for approval and if there are grounds for the filing of an application for modification or revocation of the permit. If such an application is filed, it shall be at the County's expense and would include duly noticed hearings.

45. Waivers

That pursuant to Sec. 8107-5.6.20, where provisions for the waiver of an ordinance requirement, the waiver must be signed by all adult occupants of a dwelling, or in the case of other sensitive uses, by the owner of the use in question. Once a waiver is granted, the permittee is exempt from affected ordinance requirements for the life of permit. Unless otherwise stated by the signatory, a waiver signed pursuant to Sec. 8107-5.6.14b shall also be considered a waiver applicable to Section 8107-5.6.16, .17 and .18.

CONDITIONS FOR: CUP-3543 MOD #4
RESOLUTION NO.: 83-40
DATE: November 17, 1983

APPLICANT: Agoil, Inc.
PAGE: Twelve

46. Application of Sensitive Use Related Standards

That pursuant to Sec. 8107-5.6.21, the imposition of regulations on oil operations, which are based on distances from occupied sensitive uses, shall only apply to those occupied sensitive uses which were in existence at the time the permit for the subject oil operations were approved.

47. Secondary Recovery

That "secondary recovery" operations may be permitted, for the proposed wells subject to approval by either the Planning Commission or the Planning Director, depending on the known environmental impacts based upon advice from the State Division of Oil and Gas.

48. Natural Gas

The applicant shall submit a plan for disposition of produced natural gas to the Planning Director for approval. Such approved plan shall be implemented prior to issuance of a Zoning Clearance for drilling of additional oil wells. Flaring of produced natural gas shall cease after December 31, 1983.

49. Oil Pipeline

All produced oil shall be transported off site when production averages 350 barrels per day over a 120 day period. Pursuant to Condition 6 a modification permit shall be required prior to pipeline construction.

AIR POLLUTION CONTROL DISTRICT

50. Authority to Construct

That facilities shall be constructed and operated in accordance with the Rules and Regulations of the Ventura County Air Pollution Control District. An APCD Authority to Construct shall be obtained for all equipment subject to permit prior to construction or commencement of drilling operations.

PUBLIC WORKS AGENCY

51. Obstruction of Drainage Courses

That in conjunction with the construction and use of the drill site(s) and the access road(s), the permittee shall ensure that the site(s) and road(s) shall not obstruct natural drainage courses.

52. Truck Access Prohibited

That in conjunction with the drilling operations, the permittee shall be prohibited from utilizing Koenigstein Road as a primary access road with 3/4-ton and over trucks, except for secondary emergency traffic.

53. Berm

That in conjunction with the construction of the drill site, the permittee shall construct an earthen berm around the perimeter of the site to ensure that any oil spills which may occur are contained on the site.

ENVIRONMENTAL HEALTH DIVISION

54. Sanitary Facilities

That suitable adequate sanitary toilets and washing facilities approved by the Environmental Health Division shall be installed and maintained in a clean and sanitary condition at all times during periods of drilling.

55. Potable Water

That an adequate supply of safe potable water for drinking purposes shall be supplied to the site as approved by the Environmental Health Division.

CONDITIONS FOR: CUP-3543 MOD #4

APPLICANT: Agoil, Inc.

RESOLUTION NO.: 83-40

PAGE: Thirteen

DATE: November 17, 1983

56. Abandoned Wells

That any abandoned water well(s) under the permittee's control and operation on the permittee's drilling or production equipment site shall be properly destroyed in accordance with the Ventura County Well Ordinance.

DHlpE279

EXHIBIT "3"

Nearest Property Line



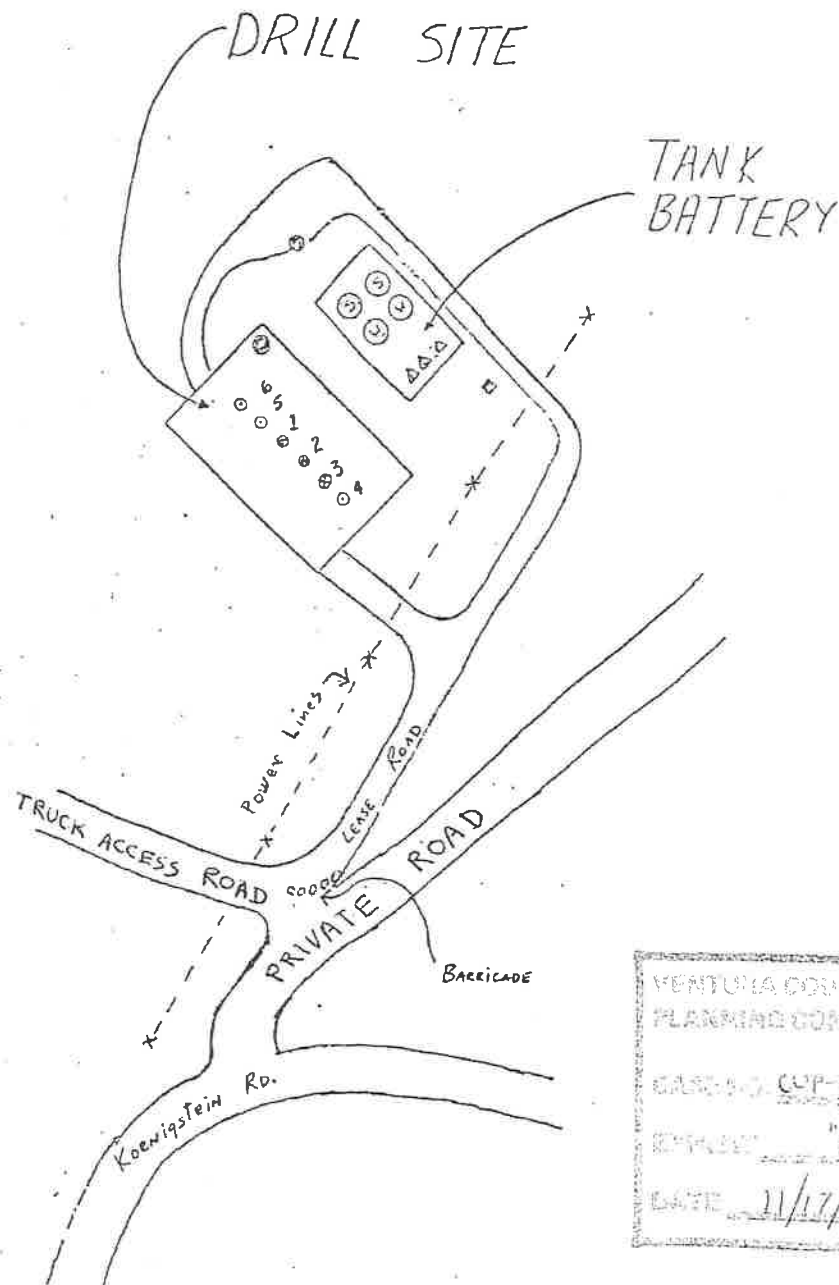
LEGEND

EXISTING FACILITIES

- Rod Pump Oil Wells W/ Elec. Engines
- ⊗ 125 Barrel Produced Water Tank*
- ⊗ 500 Barrel Oil Storage Tank*
- ⊗ 500 Barrel Wash Tank*
- ⊗ 250 Barrel Oil Storage Tank*
- ⊗ 250 Barrel Wash Tank*
- △ Gas Trap
- Gas Flare
- ⊗ Oil Well With Hydraulic Unit
- ⊗ Crude Oil Loading Rack

ADDED FACILITIES

- △ Gas Trap
- Rod Pump Oil Wells With Electric Engines
- * Connected to Vapor Recover System



VENTURA COUNTY	
PLANNING COMMISSION	
CASE NO.	CUP-3543 MOD #4
PROJECT	"A"
DATE	11/17/83

CUP 3543
MOD.#4

