N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

0-3
ast 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: LC-028375-B

1a. Type of Work: [X] DRILL [ ] REENTER

6. If Indian, Allotee or Tribe Name:

1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

7. Unit or CA Agreement Name and No.:

2. Name of Operator: OXY USA WTP Limited Partnership 192463

8. Lease Name and Well No.: OXY Vision Federal #1

3a. Address: P.O. Box 50250 Midland, TX 79710-0250

3b. Phone No. (include area code): 432-685-5717

9. API Well No.: 30-015- 34054

4. Location of Well (*Report location clearly and in accordance with any State equirements*)*

At surface: 760 FSL 810 FWL SWSW(M)

At proposed prod. zone:

RECEIVED
APR 05 2005
OCD-ARTESIA

10. Field and Pool, or Exploratory: Undesignated Crow Flats Morrow

11. Sec., T., R., M., or Blk. and Survey or Area: Sec 5 T17S R27E

14. Distance in miles and direction from nearest town or post office*: 5 miles northwest from Artesia, NM

12. County or Parish: Eddy

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any)	16. No. of Acres in lease	17. Spacing Unit dedicated to this well
760'	320	320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
N/A	9200'	9312774
21. Elevations (Show whether DF, KDB, RT, GL, etc.	**22. Approximate date work will start***	**23. Estimated duration**
3341'	4/15/05	30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signuature	Name (*Printed/Typed*)	Date
	David Stewart	2/15/05

Title: Sr. Regulatory Analyst

Approved by (Signautre)	Name (*Printed/Typed*)	Date
/s/ Tony J. Herrell	/s/ Tony J. Herrell	APR 0 1 2005
Title	**Office**	
FIELD MANAGER	CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowlingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on Reverse)

Roswell Controlled Water Basin

WITNESS 13 3/4" Cement Job

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

Attachment 3160-3
OXY Vision Federal #1
760 FSL 810 FWL
SEC 5 T17S R27E Eddy County, NM
Federal Lease No. LC-028375-B

PROPOSED TD: 9200' TVD

BOP PROGRAM:

0 - 400'	None
400 - 1800'	13-3/8" 3M annular preventer, to be used as divertor only.
1800 - 9200'	11" 5M blind pipe rams with 5M annular preventer and rotating head below 8000'.

CASING:

Surface:	13-3/8" OD 48# H40 ST&C new casing set at 400' 17-1/2" hole
Intermediate:	9-5/8" OD 36# K55 ST&C new casing from 0-1800' 12-1/4" hole
Production:	5-1/2" OD 17# N80 LT&C new casing from 0-9200' 8-3/4" hole

CEMENT: Surface - Circulate cement with 175sx HES light premium plus w/ 2% $CaCl_2$ followed by 250sx PP w/ 2% $CaCl_2$.

Intermediate - Circulate cement with 365sx Interfill C w/ .25#/sx Flocele followed by 200sx PP w/ 2% $CaCl_2$.

Production - Cement with 1000sx Interfill H w/ .1% HR-7 followed by 415sx Super H w/ .5% HR-344 + .4% CFR-3 + 5#/sx Gilsonite + 1#/sx salt + .2% HR-7. Estimated top of cement is 5400'.

Note: Cement volumes may need to be adjusted to hole caliper.

MUD:

0 - 400'	Fresh water/native mud. Lime for pH control (9-10). Paper for seepage. Wt 8.7-9.2 ppg, Vis 32-34 sec
400 - 1800'	Fresh/*Brine water. Lime for pH control (10.0-10.5). Paper for seepage. Wt 8.3-9.0/10.0-10.1ppg, Vis 28-29 sec *Fresh water will be used unless chlorides in the mud system increases to 20000PPM.
1800 - 5800'	Fresh water. Lime for pH control(9-9.5). Paper for seepage. Wt 8.3-8.5 ppg, Vis 28-29 sec
5800 - 7900'	Cut brine. Lime for pH control (10-10.5). Wt 9.6-10.0 ppg, Vis 28-29sec
7900 - 9200'	Mud up with an Duo Vis/Flo Trol mud system. Wt 9.6-10.0ppg, Vis 32-36sec, WL<10cc

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

RECF
FEB
OCD-A

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: **Oxy U.S.A. W.T.P. Limited Partnership** Telephone: **432.685.5719** e-mail address: **Don_Thomposn2@oxy.com**
Address: **P.O. Box 50250 Midland, TX 79710**
Facility or well name: **OXY Vision Fed. No. 1** API #: 30-015-34054 U/L or Qtr/Qtr SWSW Sec **5** T **17S** R **27E**
County: **Eddy** Latitude **32°51'31.39"N** Longitude **104°18'22.62"W** NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness **12** mil Clay ☐ Volume **11,000** bbl	Volume: ____bbl Type of fluid: ____ Construction material: ____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) **10** (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points) **0**
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points) **0**
	Ranking Score (Total Points)	**10**

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite ☐ offsite ☐ If offsite, name of facility____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface____ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**
Date: **January 27, 2005**
Printed Name/Title Don Thompson/HES Spec. Signature D Thompson

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:
Date: FEB 18 2005
Printed Name/Title Field Rep II Signature

State of New Mexico
Energy, Minerals and Natural Resources Department

DISTRICT I
[illegible] N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-015-	75720	Undesignated Crow Flats Morrow

Property Code	Property Name	Well Number
	OXY VISION FEDERAL COM	1

OGRID No.	Operator Name	Elevation
192463	OXY U.S.A. W.T.P., LP	3341'

Surface Location

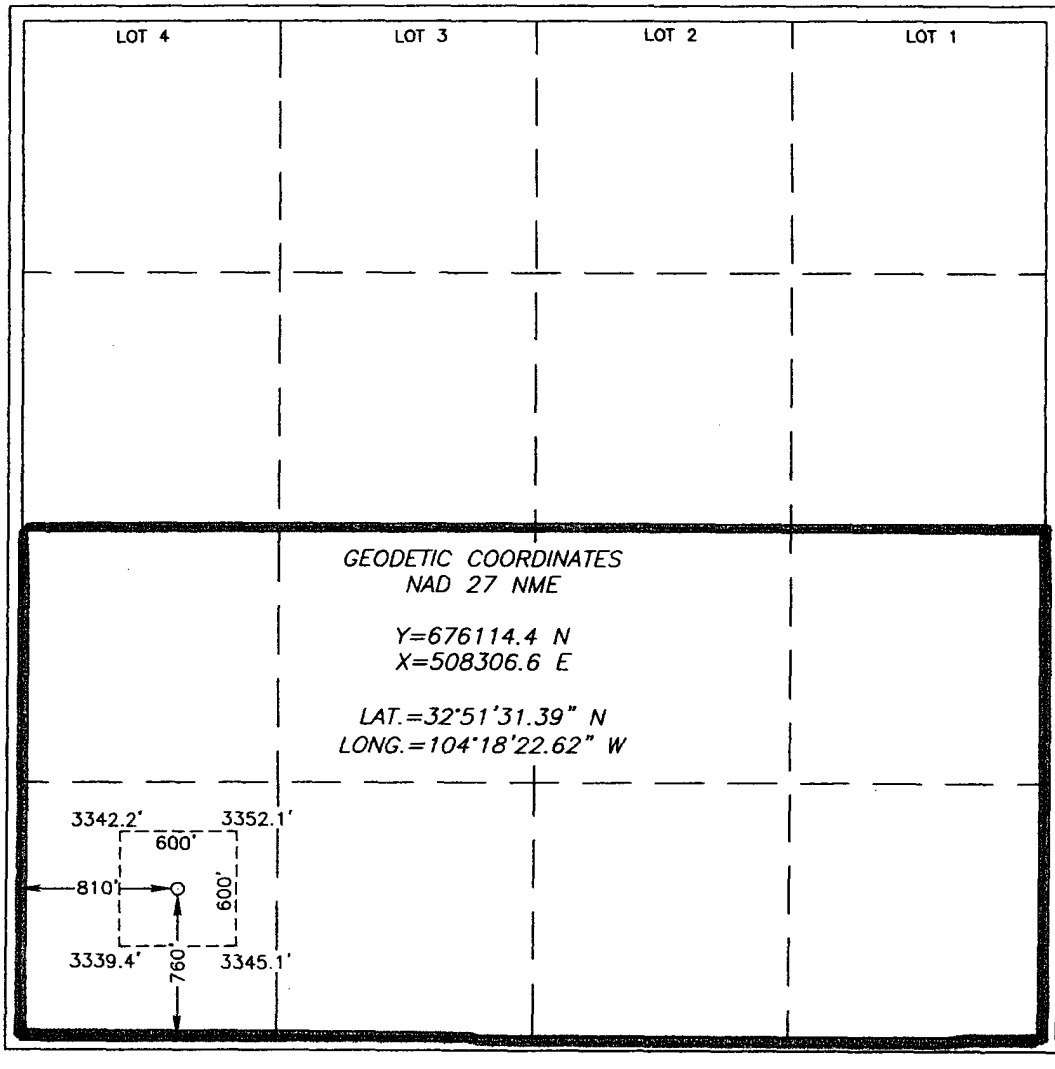
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	5	17-S	27-E		760	SOUTH	810	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320	N		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature

David Stewart
Printed Name

Sr. Regulatory Analyst
Title

2/15/05
Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

JANUARY 14, 2005
Date Surveyed LA

Signature & Seal of Professional Surveyor

GARY L. EIDSON NEW MEXICO 12641 PROFESSIONAL SURVEYOR

Gary L. Eidson 1/19/05

05.11.0003

Certificate No. GARY EIDSON 12641

EXHIBIT A

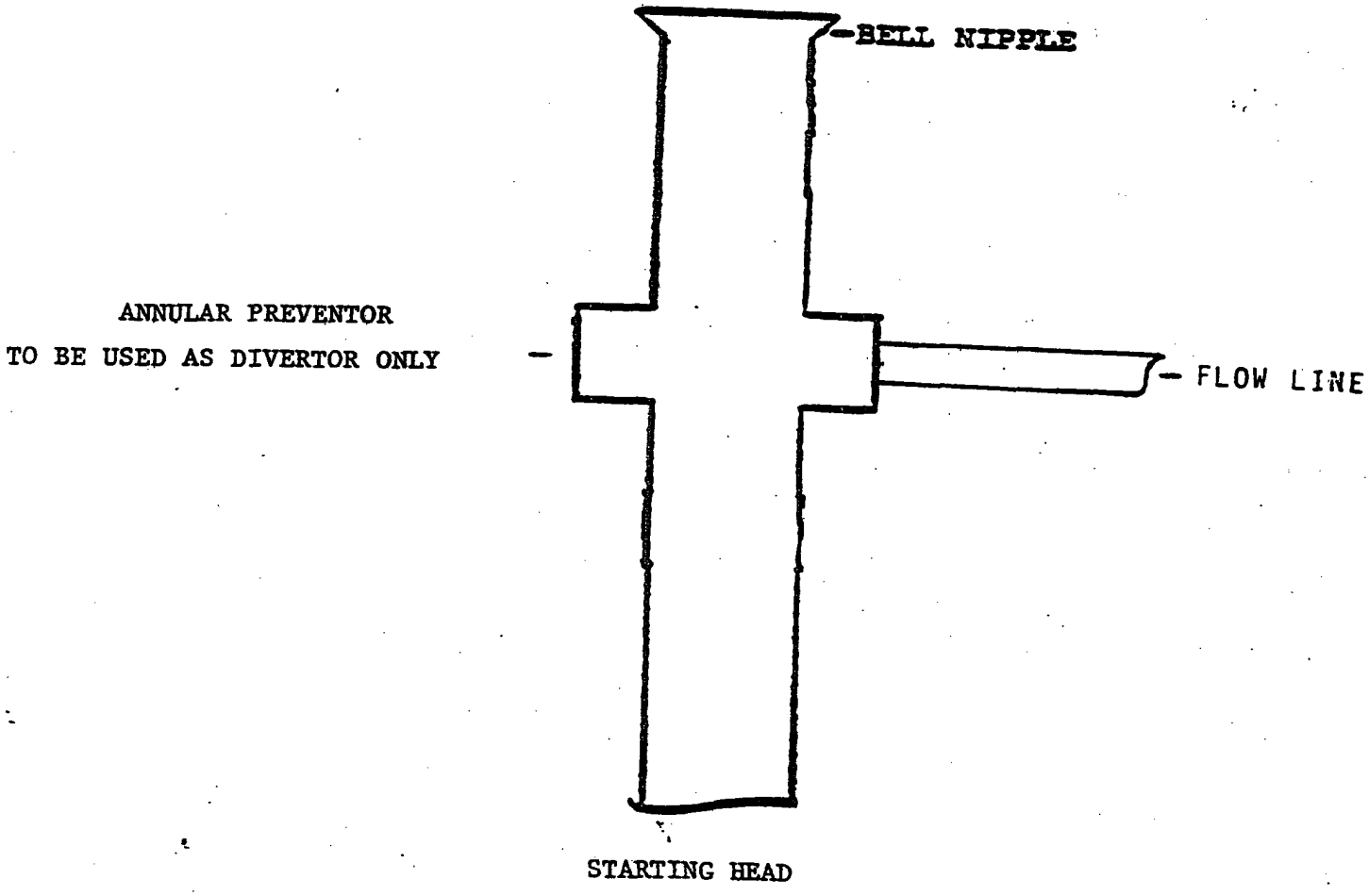
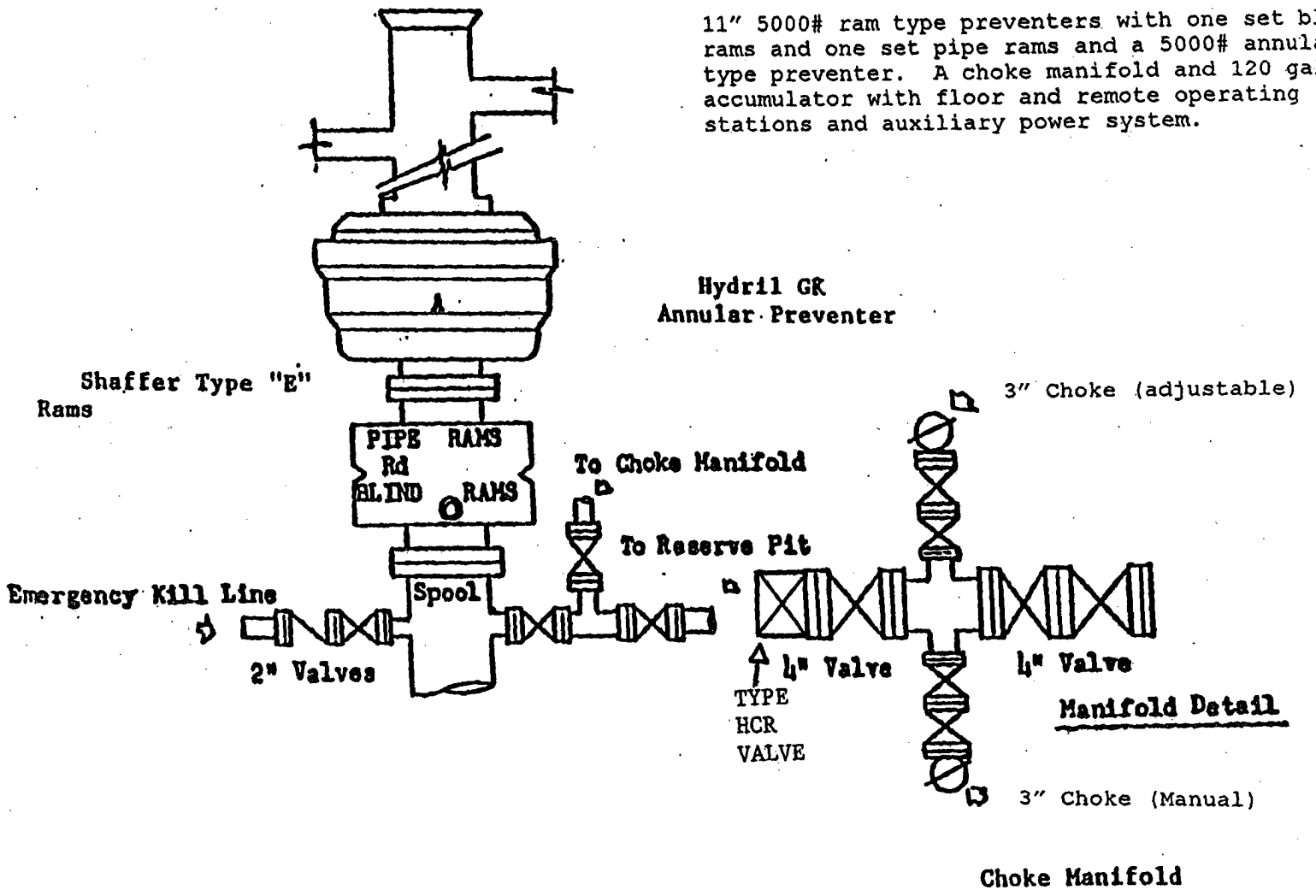

BELL NIPPLE
ANNULAR PREVENTOR
TO BE USED AS DIVERTOR ONLY
FLOW LINE
STARTING HEAD

EXHIBIT A

BLOWOUT PREVENTOR SCHEME



11" 5000# ram type preventers with one set blind rams and one set pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system.

Choke Manifold

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

OXY USA WTP Limited Partnership
OXY Vision Federal #1
Eddy County, New Mexico
Lease No. LC-028375-B

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to identify the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal may be made of the environmental effects associated with the operation.

The well, and work area have been staked by a registered New Mexico land surveyor. Boone Archaeological Services, LLC has been engaged to make an archaeological reconnaissance of the work area. Their findings concerning cultural resources will be reported to the Bureau of Land Management.

1. Existing Roads

A copy of a USGS "Red Lake, SE New Mexico" quadrangle map is attached showing the proposed location. The well location is spotted on this map, which also shows the existing road system. Exhibit B.

Directions to location:

From the intersection of USH 82 and CR 200, go north on CR 200 for approximately 1.5 miles to a proposed road survey on the right. Follow road survey 400' east to this location.

2. Planned Access Road

A. A new access road will be built. The access road will run approximately 405' east from an existing road to the location. Exhibit B.

B. Surfacing material: Six inches of caliche and water, compacted and graded.

C. Maximum Grade: Less than 3%

D. Turnouts: None needed

E. Drainage Design: N/A

F. Culverts: None needed

G. Cuts and Fills: Leveling the location will require minimal cuts or fills.

H. Gates or Cattleguards: N/A

3. Existing wells within a one mile radius of the proposed development well are shown on Exhibit C.

4. Location of Existing and/or Proposed Facilities

A. If the well is productive, production facilities will be constructed on the well pad. The facility will consist of a stack pack, one 300 bbl oil tank and one 300 bbl fiberglass water tank. All permanent above ground facilities will be painted in accordance with the BLM's painting guidelines simulating the color of sandstone brown.

B. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to and a site security plan will be submitted for the OXY Vision Federal #1 tank battery. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

5. Location and Type of Water Supply

Fresh water and brine water will be used to drill this well. It will be purchased from a supply in Loco Hills and transported to the well site.

6. Source of Construction Materials

Caliche for surfacing the well pad will be obtained from a Federal pit located in SW/4 Section 3, T17S, R27E, Eddy County, New Mexico.

7. Method of Handling Waste Disposal

A. Drill Cuttings will be disposed of in drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.

C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

E. Trash, waste paper, garbage and junk will be collected in steel trash bins and removed after drilling and completion operations are completed. All waste material will be contained to prevent scattering by the wind.

F. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. Ancillary Facilities

A. None needed.

9. Wellsite Layout

A. The location and dimensions of the well pad, mud pits, reserve pit and location of major rig components are shown on the well site layout sketch. The V-door will be to the south and the pits to the east. Exhibit D.

B. Leveling of the wellsite will be required with minimal cuts or fills anticipated.

C. The reserve pit will be plastic lined, per NMOCD requirements, the C-144 is attached.

D. While constructing the pits and material is encountered at a depth which would not allow the pits to meet the BLM stipulations with out blasting, OXY requests a variance. There will be an adequate amount of material to reclaim the pit per the stipulations.

E. The pad and pit area have been staked and flagged.

10. Plans for Restoration of the Surface

A. After completion of drilling and/or completion operations, all equipment and other materials not needed for operations will be removed.

B. Pits will be filled and location cleaned of all trash and junk to leave the well site in as aesthetically pleasing condition as possible. Any plastic material used to line the pits or sumps will be cut off below ground level as far as possible and disposed of before the pits are covered. All unattended pits containing liquid will be fenced and the liquid portion allowed to evaporate before the pits are broken and backfilled.

C. After abandonment of the well, surface restoration will be in accordance with the land owner. This will be accomplished as expeditiously as possible. Barring unforeseen problems, all pits will be filled and leveled within 90 days after abandonment.

11. Surface Ownership

The wellsite is on federal owned surface. The surface is leased to: Bogle Ltd, P.O. Box 460, Dexter, NM 88230. They will be notified of our intention to drill prior to any activity.

12. Other Information

A. Topography: The location is a flat plain. GL elevation is 3341'.

B. Soil: Sandy clay loams.

C. Flora and Fauna: The vegetative cover is generally sparse consisting of mesquite, yucca, shinnery oak, sandsage and perennial native range grasses. Wildlife in the area is also sparse consisting of coyotes, rabbits, rodents, reptiles, dove and quail.

D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.

E. Residences and Other Structures: Residence approximately 1.4 miles south.

F. Archaeological, Historical and Cultural Sites: Cultural resources have been recorded in the area. Boone Archaeological Srevices, LLC will be engaged to make an archaeological reconnaissance of the work area.

G. Land Use: Cattle ranching.

H. The well site, if a producer, will be maintained and kept clean of all trash and litter which detracts from the surrounding environment. Equipment will be maintained in accordance with good operating practice.

I. After the wellsite is cleaned and pits and sumps backfilled, any obstruction to the natural drainage will be corrected by ditching or terracing. All disturbed areas, including any access road no longer needed, will be ripped. Those areas will be reseeded with grass if, in the opinion of the land owner, it is required.

13. Operator's Representatives and Certification

The field representative responsible for assuring compliance with the approved surface use and operations plan are as follows:

John Erickson
Production Coordinator
P.O. Box 69
Hobbs, New Mexico 88240
Office Phone: 505-393-2174
Cellular: 505-390-6426

Joe Fleming
Drilling Coordinator
P.O. Box 50250
Midland, TX 79710-0250
Office Phone: 915-685-5858

Calvin C. (Dusty) Weaver
Operation Specialist
P.O. Box 2000
Levelland, TX 79336
Office Phone: 806-229-9467
Cellular: 806-893-3067

Terry Asel
Operation Specialist
1017 W. Stanolind Rd.
Hobbs, NM 88240
Office Phone: 505-397-8217
Cellular: 505-631-0393

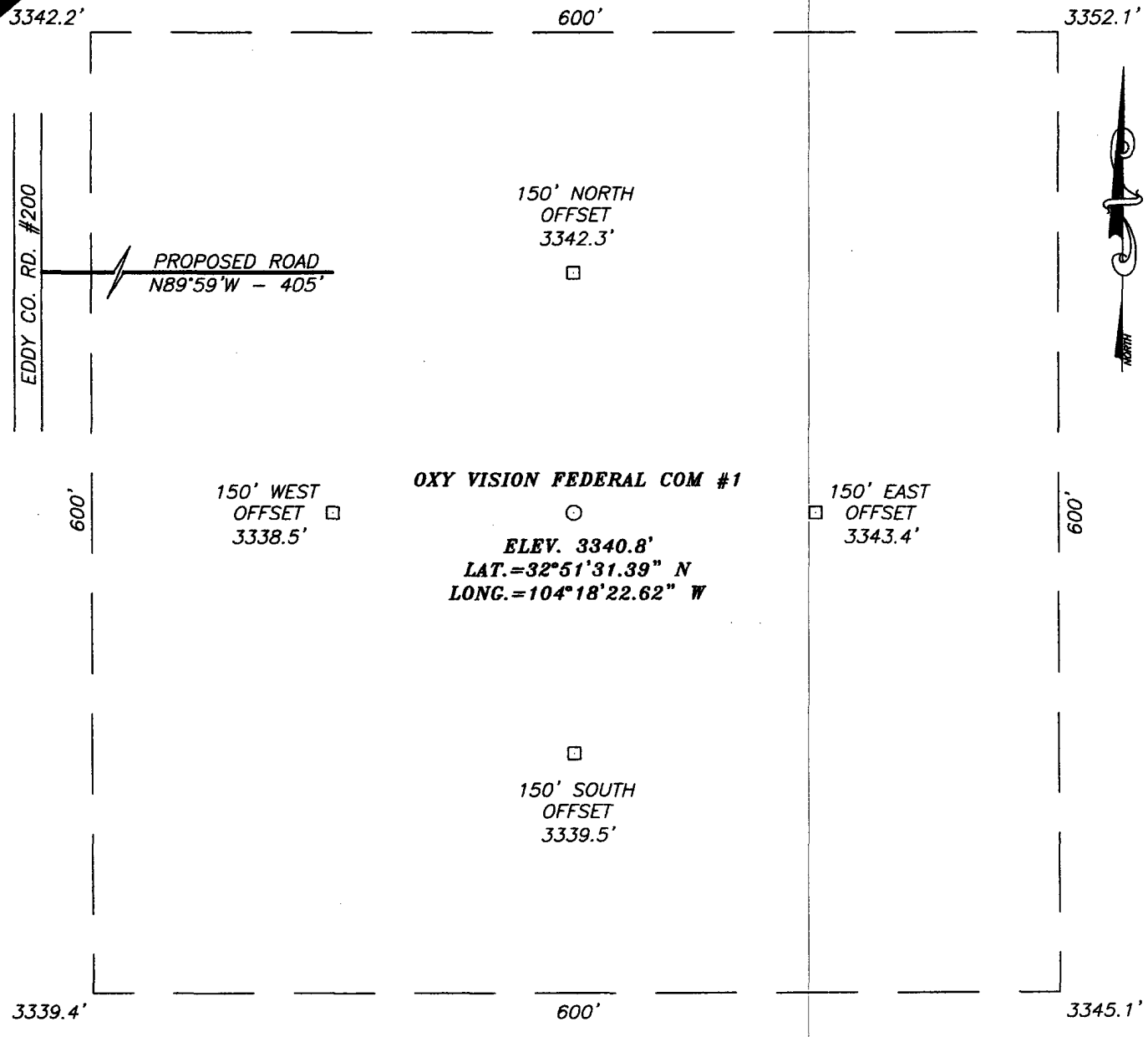
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by OXY USA WTP Limited Partnership and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

2/15/05
DATE

Scott Gengler
Engineering Advisor
432-685-5825
South Permian Asset Team
OXY USA WTP Limited Partnership

ON 5, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #82 (LOVINGTON HWY) & EDDY CO. RD. #200 (KARR RANCH) GO NORTH ON CO. RD. #200 FOR 1.5 MILES TO A PROPOSED ROAD SURVEY ON THE RIGHT. FOLLOW ROAD SURVEY 400' EAST TO THIS LOCATION.

100 0 100 200 Feet

Scale:1"=100'

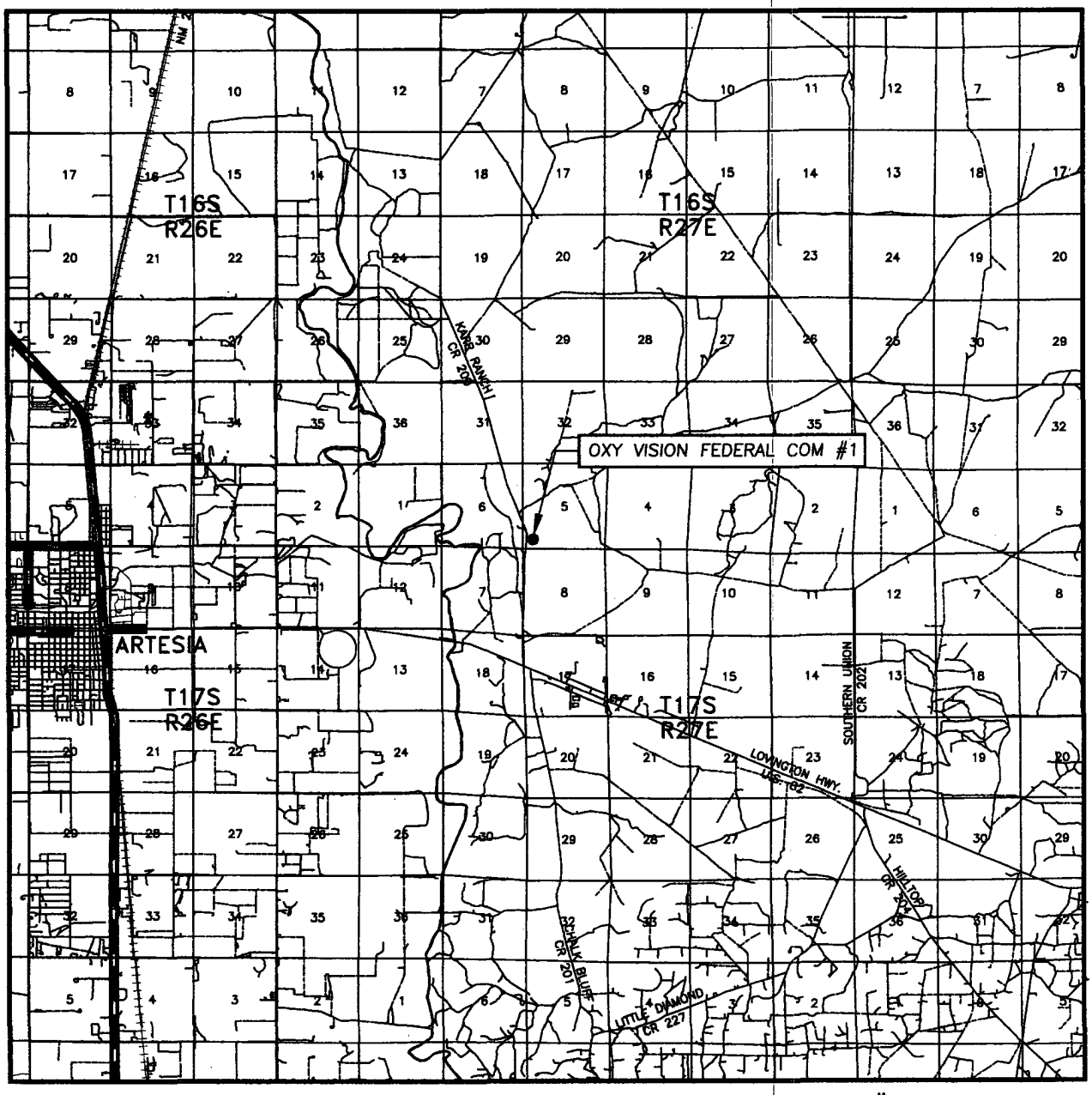
PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

OXY U.S.A. W.T.P., LP

OXY VISION FEDERAL COM #1 WELL
LOCATED 760 FEET FROM THE SOUTH LINE
AND 810 FEET FROM THE WEST LINE OF SECTION 5,
TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 1/14/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.0003	Dr By: LA	Rev 1:N/A	
Date: 1/18/05	Disk: CD#4	05110003	Scale:1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 5 TWP. 17-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 760' FSL & 810' FWL

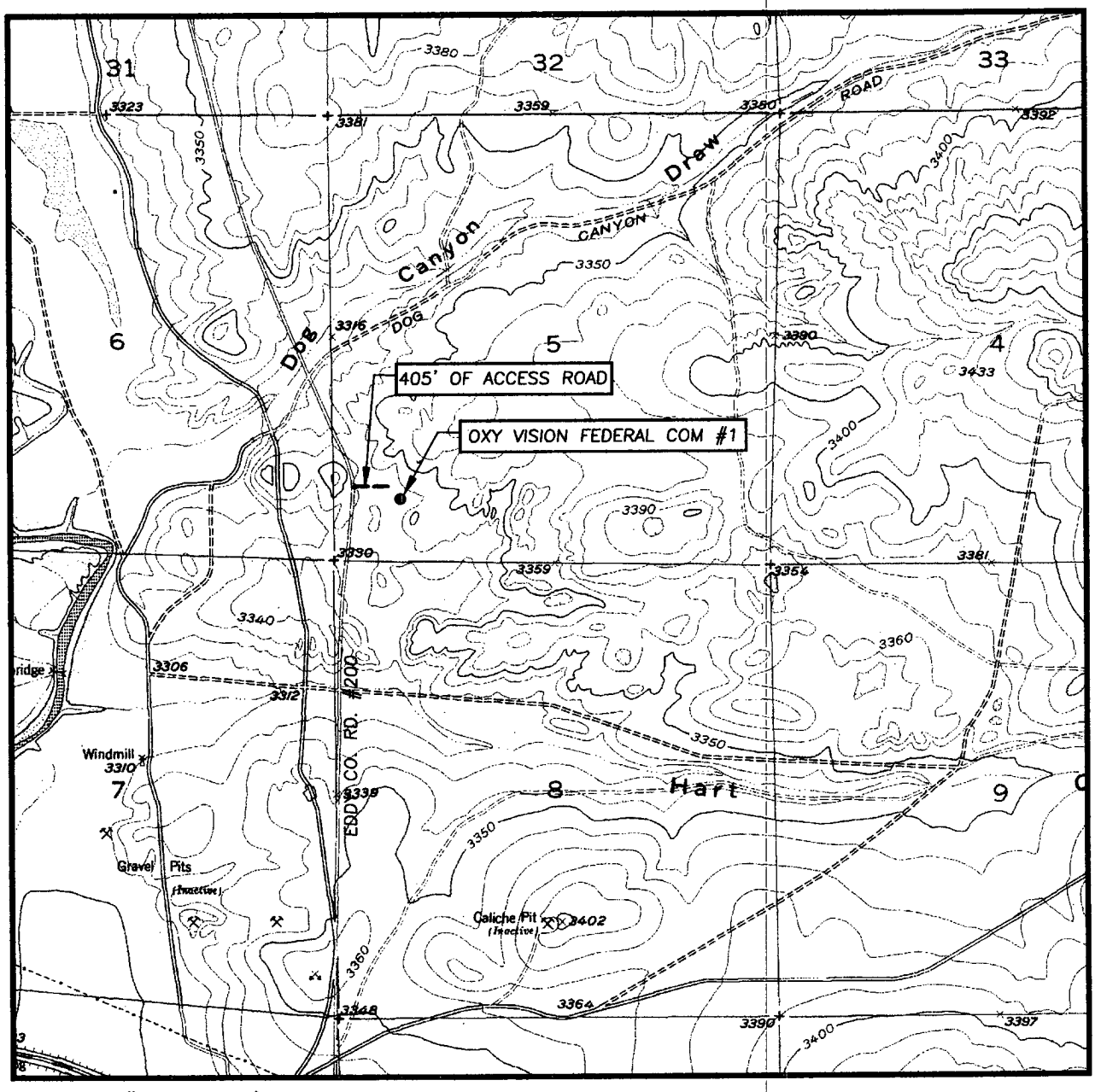
ELEVATION 3341'

OPERATOR OXY U.S.A. W.T.P., LP

LEASE OXY VISION FEDERAL COM

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
SPRING LAKE, N.M. – 10'

SEC. 5 TWP. 17-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 760' FSL & 810' FWL

ELEVATION 3341'

OPERATOR OXY U.S.A. W.T.P., LP

LEASE OXY VISION FEDERAL COM

U.S.G.S. TOPOGRAPHIC MAP
SPRING LAKE, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

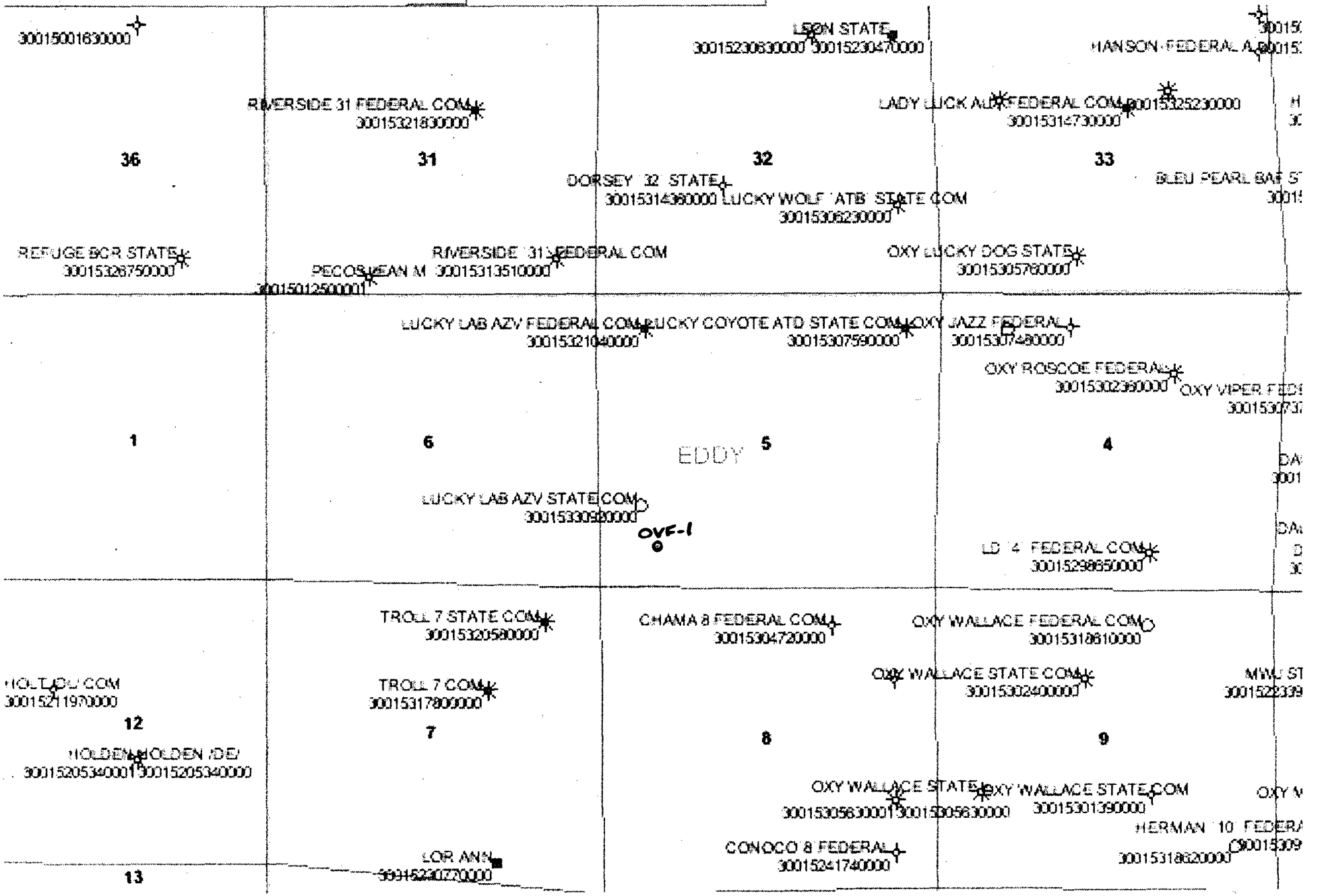
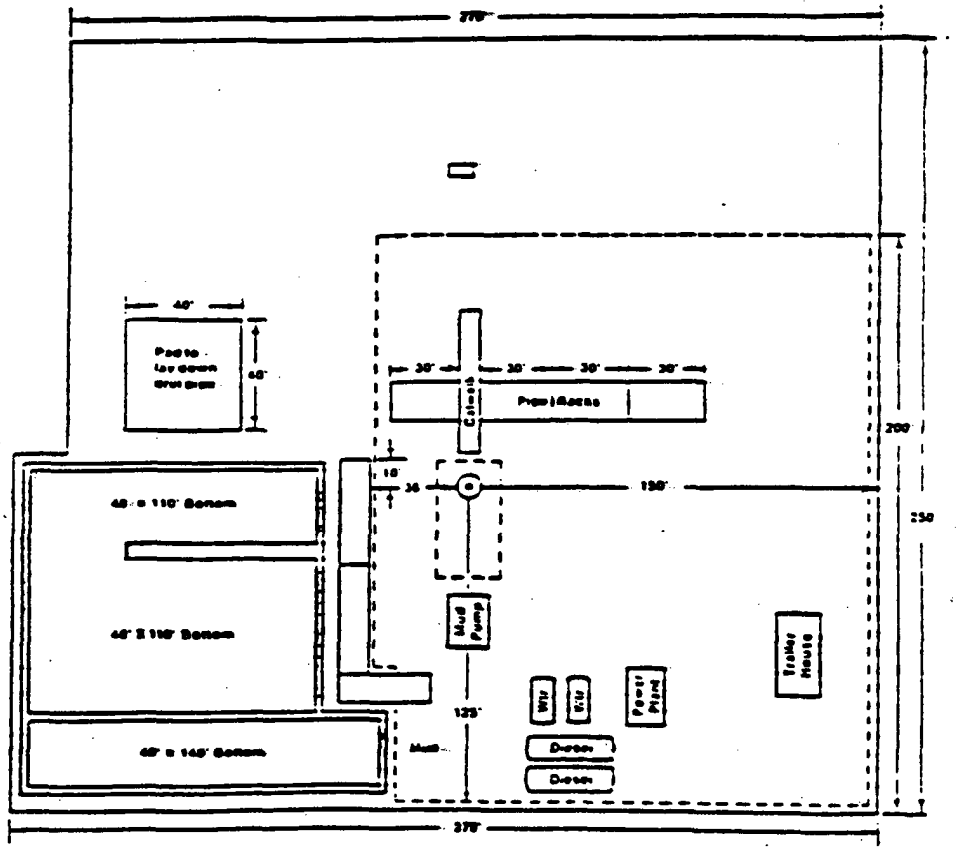

30015001630000
LEON STATE
30015230630000 30015230470000
HANSON FEDERAL A
RIVERSIDE 31 FEDERAL COM
30015321830000
LADY LUCK AUS FEDERAL COM
30015314730000
30015325230000
36
31
32
33
DORSEY 32 STATE
30015314360000
LUCKY WOLF ATB STATE COM
30015306230000
BLEU PEARL BAR ST
REFUGE BCR STATE
30015328750000
PECOS KEAN M 30015313510000
30015012500001
RIVERSIDE 31 FEDERAL COM
OXY LUCKY DOG STATE
30015305760000
LUCKY LAB AZV FEDERAL COM
30015321040000
LUCKY COYOTE ATD STATE COM
30015307590000
OXY JAZZ FEDERAL
30015307490000
OXY ROSCOE FEDERAL
30015302360000
OXY VIPER FED
1
6
EDDY
5
4
LUCKY LAB AZV STATE COM
30015330980000
OVF-1
LD 4 FEDERAL COM
30015298650000
TROLL 7 STATE COM
30015320580000
CHAMA 8 FEDERAL COM
30015304720000
OXY WALLACE FEDERAL COM
30015318610000
OXY WALLACE STATE COM
30015302400000
TROLL 7 COM
30015317800000
30015211970000
12
7
8
9
HOLDEN HOLDEN /DE/
30015205340001 30015205340000
OXY WALLACE STATE
OXY WALLACE STATE COM
30015305630001 30015305630000
30015301390000
HERMAN 10 FEDERA
CONOCO 8 FEDERAL
30015241740000
30015318620000
LOR ANN
13

EXHIBIT D

LOCATION PLAT



United States Department of the Interior
Bureau of Land Management
Roswell District
2909 W. Second Street
Roswell, New Mexico 88202

Attention: Armando A. Lopez

RE: OXY Vision Fed #1
Section 5, T17S-R27E
Eddy County, New Mexico

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

OPERATOR NAME: OXY USA WTP Limited Partnership
ADDRESS: P. O. Box 50250
Midland, Texas 79710

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

LEASE NO.: LC-028375-B

LEGAL DESCRIPTION: 760' FSL and 810' FWL Section 5, T17S-R27E
Eddy County, New Mexico

FORMATIONS: All.

BOND COVERAGE: Nationwide

BLM BOND FILE NO.: ES 0136

OXY USA WTP Limited Partnership

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TITLE: Sr. Landman Advisor
DATE: February 14, 2005

cc: David Stewart

OXY USA WTP
Limited Partnership
PO Box 50250
Midland, TX 79710

Hydrogen Sulfide (H_2S) Contingency Plan

For

OXY Vision Fed. No. 1
760 ft FSL, 810 ft FWL
Sec 5, T17S, R27E
Eddy County, NM

And

Patterson/UTI Rig 508

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PREFACE

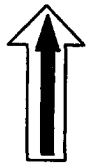
An effective and viable Contingency Plan is intended to provide prior planning and guidance in responding to emergency incidents. The primary considerations in its development are protection of personnel, the public, company and public property, and the environment.

Although the plan addresses varied emergency situations which may occur, it recognizes that flexibility and the use of the organization's knowledge and experience is critical to safe resolution of emergency incidents. Response actions outlined in the plan provide a framework, which may be placed into operation without confusion. These actions should promote quick and decisive actions during the critical initial period and immediately following an emergency. As the response progresses, additional guidelines and procedures may need to be implemented as the situation dictates. In addition, all emergency incidents must be properly reported per the Oxy Incident Reporting and Notification Policy, state and federal requirements, etc.

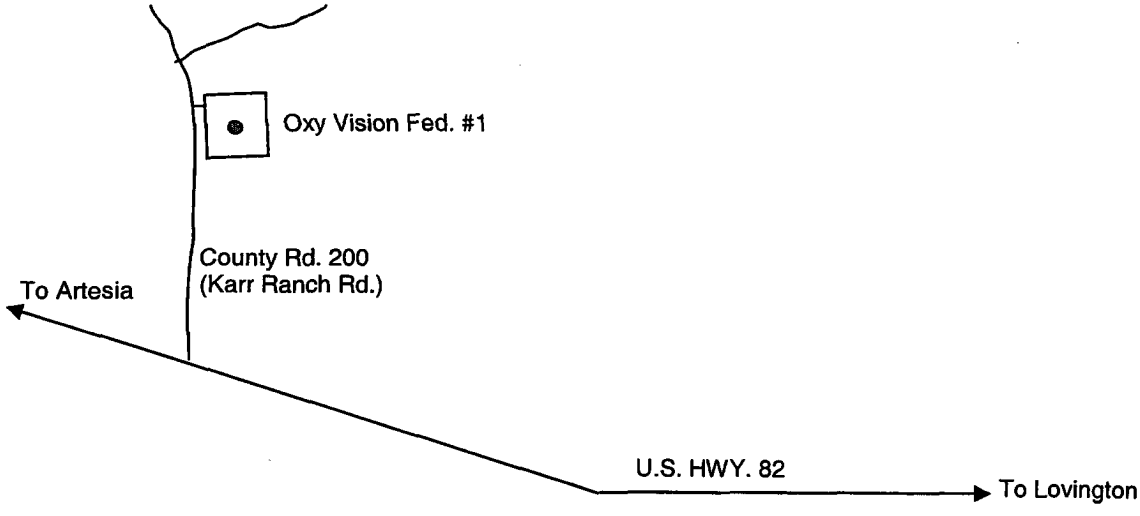
This Contingency Plan is intended for use on Oxy Downhole Services Group projects and the operations within their area of responsibility, such as drilling, critical well work, etc.

A copy of the Plan shall be maintained in the Top Dog House, Rig Managers trailer, and Company Representative's trailer if applicable.

Oxy Vision Fed. No. 1
Y = 676114.4 N
X = 508306.6 E
Lat. 32°51'31.39"N
Long. 104°18'22.62" W

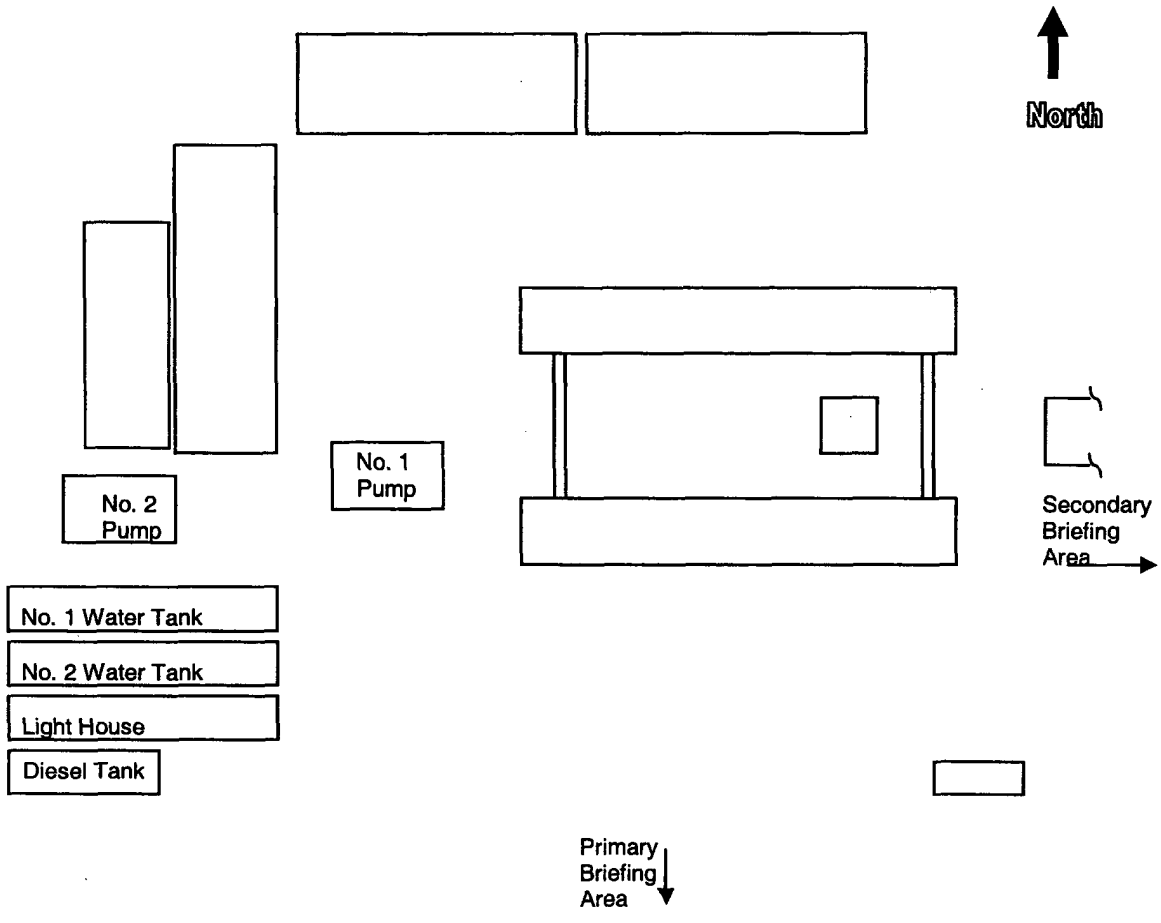


NORTH



From the intersection of US HWY. 82 and County Rd. 200 (Karr Ranch Rd.) go north on County Rd. 200 for approximately 1.5 miles. Turn right (east) on caliche road and go east for 400 feet to the well location.

Patterson/UTI 508



EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES

Activation of the Emergency Action Plan

A. In the event of any emergency situation, all personnel on location should first ensure that the following items are initiated. After that, they should refer to the appropriate Specific Emergency Guidance sections on pages ten (10) through twelve (12) in this document for further responsibilities:

1. Notify the senior ranking contract representative on site.
2. Notify Oxy representative in charge.
3. Notify civil authorities if the Oxy Representative can not be contacted and the situation dictates.
4. Perform rescue and first aid as required (without jeopardizing additional personnel).

General Responsibilities

Oxy Permian Personnel:

A. Operations Specialist: The Oxy Drilling/Critical Well Servicing Operations Specialist or contract personnel serving in that capacity will serve as Operations Chief Officer for all emergency incidents. The Operations Chief Officer is responsible for:

1. Notification to the Downhole Services Team Leader of the incident occurrence.
2. Notification to the local RMT/PMT leader of the incident occurrence, and the need for the designated local RMT/PMT Incident Commander to act in that capacity for the response effort.
3. Sole control of all tactical activities directed toward reducing the immediate hazard, establishing situational control and restoring the operations to a non-emergency state.

B. Local RMT/PMT Designated Incident Commander: The Oxy local RMT/PMT Designated Incident Commander will serve as the overall Incident Commander for the drilling or critical well servicing emergency incident. The Incident Commander is responsible for:

1. Coordinating with the Downhole Services Team Leader for notification to the Oxy Crisis Management team of the incident occurrence.
2. Establishing and managing the overall incident command structure and response from inception through restoration of normal activities in the area.

C. Downhole Services HES Tech: The Downhole Services HES Tech (or his designate) is responsible for reporting to the incident as soon as

reasonably possible, to provide support to the response effort as required by the Operations Chief Officer or the Incident Commander.

Contract Drilling Personnel will immediately report to their assigned stations and perform their duties as outlined in the appropriate Specific Emergency Guidance sections on pages ten (10) through twelve (12) in this document.

Other Contractor Personnel will report to the safe briefing area to assist Oxy personnel and civil authorities as requested when it is safe to do so and if they have been adequately trained in their assigned duties.

Civil Authorities (Law Enforcement, Fire, and EMS) will be responsible for:

1. Establishing membership in the Unified Incident Command.
2. As directed by the Incident Commander and the Unified Command, control site access, re-route traffic, and provide escort services for response personnel.
3. Perform all fire control activities in coordination with the Unified Command.
4. Initiate public evacuation plans as instructed by the Incident Commander.
5. Perform rescue or recovery activities with coordination from the Unified Command.
6. Provide medical assistance as dictated by the situation at hand.

H2S RELEASE

The following procedures and responsibilities will be implemented on activation of the H2S siren and lights.

All Personnel:

1. On alarm, don escape unit (if available) and report to upwind briefing area.

Rig Manager/Tool Pusher:

1. Check that all personnel are accounted for and their condition.
2. Administer or arrange for first aid treatment, and /or call EMTs as needed.
3. Identify two people best suited to secure well and perform rescue, and instruct them to don SCBA.
4. Notify Contractor management and Oxy Representative.
5. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.

Two People Responsible For Shut-in and Rescue:

1. Don SCBA and acquire tools to secure well and perform rescue, i.e., wrenches, retrieval ropes, etc.
2. Utilize the buddy system to secure well and perform rescue(s).
3. Return to the briefing area and stand by for further instructions.

All Other Personnel:

1. Isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

Oxy Representative:

1. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.
2. Notify Operation Specialists or Team Leader and RMT Leader or Local Incident Commander, and Police, Fire Department, or other local emergency services as required.

Training

There will be an initial training session prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan (Contingency Plan). This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police shall be the Incident Command of any major release. Ignition of the well will be with the concurrence of the drilling team leader and the Oxy Crisis Management Team as time allows.

Characteristics of H2S and SO2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Oxy Permian personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as; type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. This response plan must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER).

WELL CONTROL

The following procedures will be implemented when a loss of primary control is indicated. Indicators of loss of primary control are flow from the well, an increase in pit volume, or when the drilling fluid used to fill the hole on trips is less than the calculated pipe displacement volume. The emergency signal for well control procedures will be a single long blast of the rig air horn.

Kick While Drilling - Procedures And Responsibilities

Driller:

1. Stop the rotary and hoist the kelly above the rotary table.
2. Stop the mud pump(s).
3. Check for flow.
4. If flowing, sound the alarm immediately.
5. Ensure that all crew members fill their responsibilities to secure the well.
6. Record drill pipe and casing shut-in pressures and pit volume increase and begin kill sheet.

Derrickman:

1. Go to BOP/choke manifold area.
2. Open choke line valve on BOP.
3. Signal to Floorman #1 that the choke line is open.
4. Close chokes after annular or pipe rams are closed.
5. Record shut-in casing pressure and pit volume increase.
6. Report readings and observations to Driller.
7. Verify actual mud weight in suction pit and report to Driller.
8. Be readily available as required for additional tasks.

Floorman # 1:

1. Go to accumulator control station and await signal from Derrickman.
2. Close annular preventer and HCR on signal (if available, if not then close pipe rams).
3. Record accumulator pressures and check for leaks in the BOP or accumulator system.
4. Report to Driller, and be readily available as required for additional tasks.

Floorman # 2:

1. Start water on motor exhausts.
2. Notify Contractor Tool Pusher or Rig Manager of well control situation.
3. Check location for ignition sources and extinguish or turn off, and stop any welding in progress.
4. Report to Driller, and be readily available as required for additional tasks.

Floorman # 3:

1. Stand-by with Driller, and be readily available as required for additional tasks.

Tool Pusher/Rig Manager:

1. Notify Oxy Representative and report to rig floor.
2. Review and verify all pertinent information.
3. Communicate information to Oxy Representative, and confer on an action plan.
4. Finalize well control worksheets, calculations and preparatory work for action plan.
5. Initiate and ensure the action plan is carried out.
6. Communicate any changes in well or site conditions, or any indications that the action plan needs to be revised to the Oxy representative.

Oxy Representative:

1. Notify Operation Specialists or Team Leader and RMT Leader or Local Incident Commander, and Police, Fire Department, or other local emergency services as required.

Kick While Tripping - Procedures and Responsibilities

Driller:

1. Sound the alarm immediately when pipe displacement volume is less than 75% of calculated.
2. Position the upper tool joint just above rotary table and set slips.
3. Check for flow.
4. Ensure that all crew members fill their responsibilities to secure the well.
5. Record drill pipe and casing shut-in pressures and pit volume increase, and begin kill sheets.

Derrickman: (same as while drilling)

Floor Man # 1:

1. Install full opening valve (with help from Floorman #2) in top drill string connection.
2. Tighten valve with make up tongs.
3. Go to accumulator control station and await signal from Derrickman.
4. Close annular preventer and HCR valve on signal (if available, if not then close pipe rams).
5. Record accumulator pressures and check for leaks in the BOP and accumulator system.
6. Report to Driller, and be readily available as required for additional tasks.

Floor Man # 2:

1. Assist installing full opening valve in drill string.
2. Position back-up tongs for valve make-up.
3. Start water on motor exhausts.
4. Notify Contractor Tool Pusher or Rig Manager of well control situation.
5. Check location for ignition sources and extinguish or turn off, and stop any welding in progress.
6. Report to Driller, and be readily available as required for additional tasks.

Floorman # 3, Rig Manager/Tool Pusher, and Oxy Representative: (same as while drilling)

PUBLIC RELATIONS

Oxy recognizes that the news media have a legitimate interest in incidents at Oxy facilities that could affect the public. It is to the company's benefit to cooperate with the news media when incidents occur because these media are our best liaison with the public.

Our objective is to see that all reports of any emergency are factual and represent the company's position fairly and accurately. Cooperation with news media representatives is the most reliable guarantee that this objective will be met.

All contract and Oxy employees are instructed **NOT** to make any statement to the media concerning the emergency incident. If a media representative contacts any employee, they should refer them to the designated Emergency Command Center where they should contact the Incident Commander or his designated relief for any information concerning the incident.

OXY PERMIAN DOWNHOLE SERVICES GROUP

	LOCATION	OFFICE	HOME	CELL	PAGER
Manager Operations Support					
Hardesty, Steve	Midland	432-685-5880	432/694-6441	713-560-8095	
Team Leader					
Pennington, Randy	Midland	432-685-5684	432/689-7642	432-556-0207	
			Toledo Bend =	318-590-2349	
Operations Specialists					
Fleming, Joe	Midland	432-685-5858	432/699-0875	432-425-6075	432-498-3281
Ray, Fred	Midland	432-685-5683	432/362-2857	432-661-3893	432-499-3432
HES Tech					
Thompson, Don	Midland	432-685-5719	432/684-3900	432-556-1505	

Emergency Notification Numbers

Public Authorities		
New Mexico State Police	Artesia	505/746-2704
New Mexico State Police	Carlsbad	505/885-3137
New Mexico State Police	Hobbs	505/392-5588
Eddy County Sheriff's Office	Artesia	505/746-2704
Eddy County Sheriff's Office	Carlsbad	505/887-7551
Lea County Sheriff's Office	Hobbs	505/393-2515
Local Emergency Planning Center	Eddy County	505/887-9511
Local Emergency Planning Center	Lea County	505/397-9231
New Mexico Oil & Gas Commission	Artesia	505/748-1283
New Mexico Oil & Gas Commission	Hobbs	505/393-6161
NM Emergency Response Center	Hobbs	505/827-9222

Emergency Services		
Fire Fighting, Rescue, Ambulance, Police	Artesia	911
Fire Fighting, Rescue, Ambulance, Police	Carlsbad	911
Fire Fighting, Rescue, Ambulance, Police	Hobbs	911
Flight For Life	Lubbock	806/743-9911
Aerocare	Lubbock	806/7478923
Med Flight Air Ambulance	Albuquerque	505/842-4433

Other Emergency Services		
Boots and Coots		1/800-256-9688
Cudd Pressure Control	Midland	432/699-0139
B.J. Services	Artesia	505/746-3569
Halliburton	Artesia	505/746-2757

OXY Permian Production and Plant Personnel OXY Permian Crisis Team Hotline Notification (713) 935-7210					
PERSON	**LOCATION**	**OFFICE**	**FAX**	**CELL**	**PAGER**
Asset Management-Operations Areas					
OXY Permian General Manager: Tom Menges	Houston	(281) 552-1147	(281) 552-1484	(713) 560-8038	
South Permian Asset: Matt Hyde	Midland	(432) 685-5802	(432) 685-5930	(432) 556-5016	
RMT/PMT Leaders: South Permian Asset					
Frontier RMT:	Midland				
PERSON	**LOCATION**	**OFFICE**	**FAX**	**CELL**	**PAGER**
Production Coordinators: S. Permian Asset					
New Mexico: John Erickson	Hobbs	(505) 393-2174	(505) 397-2671	(505) 390-6426	(505) 370-6836
OXY Permian HES Personnel OXY Permian Crisis Team Hotline Notification (713) 935-7210					
PERSON	**LOCATION**	**OFFICE**	**FAX**	**CELL**	**PAGER**
HES Coordinators & Area of Responsibility					
Frontier:	Midland				
HES Techs & Area of Responsibility					
Hobbs RMT: Steve Bishop	Hobbs	(505) 397-8251	(505) 397-8204	(505) 390-4784	(877) 339-1954- 1118#
Frontier-New Mexico: Rick Kerby	Hobbs	(505) 393-2174	(505) 393-2671	(505) 390-8639	(505) 370-6527

TITLE PAGE/ABSTRACT/
NEGATIVE SITE REPORT
CFO/RFO

03

1. BLM Report No.	2. Reviewer's Initials/Date_____ ACCEPTED ( ) REJECTED ( )	3. NMCRIS No. 91668

4. Type of Report Negative( ) Positive (X)

5.Title of Report: : Class III Archaeological Survey for Oxy U.S.A. W.T.P., LP's Proposed Access Road and Well Pad to Serve the Oxy Vision Federal Com No. 1 Well Author: Stephen Smith	6. Fieldwork Date: January 2 & 3, 2005 7. Report Date: January 7, 2005
Consultant Name & Address: Boone Archaeological Services 2030 North Canal Carlsbad, NM 88220 Direct Charge: Danny Boone Field Personnel Name: Stephen Smith Phone: (505) 885-1352	9. Cultural Resource Permit No. 190-2920-03-E 10. Consultant Report No. BAS 01-05-32
11. Customer Name: Oxy U.S.A. W.T.P., LP Responsible Individual: Dusty Weaver Address: 2028 Buffalo Levelland, Texas Phone: (806) 894-8307	12. Customer Project No.:

13.Land Status	BLM	STATE	PRIVATE	OTHER	TOTAL
a. Area Surveyed (acres)	8.84	0	0	0	8.84
b. Area of Effect (acres)	3.95	0	0	0	3.95

14. Linear: Length: 405 ft (total length) Width: 100 ft
255 ft (total length after 150 ft deduction because of current survey)
Block: 600 ft by 600 ft

15. Location: (Maps Attached if Negative Survey)
a. State: New Mexico
b. County: Eddy
c. BLM Office: Carlsbad
d. Nearest City or Town: Artesia, NM
e. Legal Location: T 17S, R 27E, Section 5: N½SW¼SW¼, S½SW¼SW¼ (irregular section, template anchored is SW corner)
f. Well Pad Footages: 760 ft FSL; 810 ft FWL
g. USGS 7.5 Map Name and Code Number: Spring Lake, NM (1955 Photorevised 1975) 32104-G3

16. Project Data:

a. Records Search: Date of BLM File Review: February 1, 2005 Name of Reviewer: Stephen Smith
Date of ARMS Data Review: February 1, 2005 Name of Reviewer: Stephen Smith

Findings:

Sites within 0.25 mile of the project area: During the pre-field record search for this project it was learned that four previously recorded sites are plotted within 0.25 mile of the project area, LA 30598, LA 130663, LA 130664, and LA 142609. Two sites are plotted within 500 ft of the proposed well pad, LA 130663 and LA 130664. The proposed well pad and access road interact with BLM previous project 00-757. Because of the close proximity of two previously sites (LA 130663 and LA 130664), Bruce Boeke, BLM-CFO archaeologist, requested that the previous project be resurveyed.

b. Description of Undertaking: On February 2, 2005, Stephen Smith with Boone Archaeological Services conducted an intensive pedestrian cultural survey for the proposed access road and well pad to serve the Oxy Vision Federal Com No. 1 well. During the survey one newly discovered BLM Category II site (LA 146847) and two previously recorded sites (LA 130663 & LA 130664) were encountered and recorded (or updated). On February 2 & 3, 2005, Mr. Smith recorded the newly discovered and previously recorded sites. Plats for the project area were provided by Oxy U.S.A. W.T.P., LP. The proposed well pad is staked at 600 ft by 600 ft (8.26 acres). The proposed access road begins at County Road 200 and extends 405 ft east, ending in the northwest corner of the proposed well pad. A total of 150 ft was deducted from the length of the access road because it is covered in the current survey of the well pad. Although most of the proposed well pad falls within a previous survey (BLM 00-757), the entire 600 ft by 600 ft pad was surveyed (or resurveyed) at the request of Bruce Boeke, BLF-CFO archaeologist. LA 146897 is newly discovered BLM Category II site. All observed artifacts associated with the site were fully recorded and potential for further information has been exhausted. Although the two previously recorded sites (LA 130663 & LA 130664) are within the 600 ft by 600 ft survey, the sites can be protected from construction of the well pad by the installation of a permanent fence (as per conversation with Bruce Boeke, BLM-CFO archaeologist). It is recommended that an archaeological monitor be present during the erection of the fence and the initial construction related activities within 100 ft of the site. The total area surveyed is 8.84 acres, all of which is on land administered by the BLM-CFO.

c. Environmental Setting:

Topography: The project is located in an area of gentle rolling hills with numerous gravel ridges, shallow loamy soil shallow to gypsum/caliche/ copious gravel deposits

Vegetation: Creosote, mesquite, yucca, snakeweed, cane cholla, pencil cholla, prickly pear, horse crippler, and various grasses.

Visibility: 65-75 percent due to vegetative cover

NRCS: Reeves-Gypsum land-Cottonwood association: Loamy soils that are very shallow to moderately deep over gypsum beds, and Gypsum land

d. Field Methods:

Transect Interval: Transects are no greater than 15 meters and performed in a straight-line pattern

Crew Size: 1

Time in Field: 10.5 hours

e. Artifacts Collected: None

17. Cultural Resource Findings: During the course of this survey one newly recorded site (LA 146897) and two previously recorded sites (LA 130663 & LA 130664) were encountered and recorded (or updated).

a. Identification and Description: N/A

b. Evaluation of Significance of Each Resource: N/A

18. Management Summary (Recommendations): Although three BLM Category II sites were encountered during this survey, Oxy U.S.A., W.T.P., LP's proposed well pad to serve the Oxy Vision Federal Com No. 1 well is recommended as presently staked. All observed artifacts associated with LA 146897 were fully recorded and the site is recommended as not eligible for nomination to the NRHP. A fence should be erected along the north site boundary of LA 130663 & LA 130664 to prevent impacting the sites during the construction of the well pad. An archaeological monitor should be present during the installation of the fence and during initial construction related activities within 100 ft of the site (as per conversation with Bruce Boeke, BLM-CFO archaeologist). If cultural resources are encountered during any construction related activity, construction should cease and an archaeologist with the BLM be immediately notified.

19.

I certify that the information provided above is correct and accurate and meets all appreciable BLM standards.

Responsible Archaeologist Stephen Smith 2-8-05

Signature Date

Class III Archaeological Survey for Oxy U.S.A. W.T.P., LP's Proposed Access Road and Well Pad to Serve the Oxy Vision Federal Com No.1 Well

Prepared By
Stephen Smith

Submitted By
Danny Boone
Boone Archaeological Services, LLC
Carlsbad, New Mexico 88220

For
Dusty Weaver

Oxy U.S.A W.T.P., LP
Levelland, Texas

New Mexico State Permit No.: NM-05-157
Bureau of Land Management Permit No.: 190-2920-03-E
NMCRIS No.: 91668
Report No. BAS 01-05-32

February 6, 2005

INTRODUCTION

On January 28, 2005, Oxy U.S.A. W.T.P., LP contacted Boone Archaeological Services (BAS) requesting an archaeological survey for a proposed access road and well pad to serve the Oxy Vision Federal Com No. 1 well. On February 2, 2005, Stephen Smith with Boone Archaeological Services conducted an intensive pedestrian cultural survey for the proposed pipeline. During the survey one new BLM Category II site (LA 146897) and two previously recorded sites (LA 130663 & LA 130664) were encountered and recorded. Plats for the project were provided by Oxy U.S.A. W.T.P., LP.

The proposed access road and well pad are located in Section 5, Township 17 South, Range 27 East. The project area can be found on the Spring Lake, New Mexico (1955 Photorevised 1975) 32104-G3 7.5' USGS Quadrangle map. The project totals 8.84 acres, all of which is on Federal land that is administered the Bureau of Land Management-Carlsbad Field Office (BLM-CFO).

This survey was conducted in order to comply with federal and state laws designed to protect sensitive cultural resources, including Section 106 of the National Historic Preservation Act of 1966 (as amended) and Executive Order 11593. The standards and field methods that were followed are designed to meet or exceed those required by the BLM and the State of New Mexico. The project was conducted under BLM Permit No. 190-2920-03-E and New Mexico State Permit No. NM-05-157.

Description of Undertaking

On February 2, 2005, Stephen Smith with Boone Archaeological Services conducted an intensive pedestrian cultural survey for the proposed access road and well pad to serve the Oxy Vision Federal Com No. 1 well. During the survey one newly discovered BLM Category II site (LA 146847) and two previously recorded sites (LA 130663 & LA 130664) were encountered and recorded (or updated). On February 2 & 3, 2005, Mr. Smith recorded the newly discovered and previously recorded sites. Plats for the project area were provided by Oxy U.S.A. W.T.P., LP. The proposed well pad is staked at 600 ft by 600 ft (8.26 acres). The proposed access road begins at County Road 200 and extends 405 ft east, ending in the northwest corner of the proposed well pad. A total of 150 ft was deducted from the length of the access road because it is covered in the current survey of the well pad. Although most of the proposed well pad falls within a previous survey (BLM 00-757), the entire 600 ft by 600 ft pad was surveyed (or resurveyed) at the request of Bruce Boeke, BLF-CFO archaeologist. LA 146897 is newly discovered BLM Category II site. All observed artifacts associated with the site were fully recorded and potential for further information has been exhausted. Although the two previously recorded sites (LA 130663 & LA 130664) are within the 600 ft by 600 ft survey, the sites can be protected from construction of the well pad by the installation of a permanent fence (as per conversation with Bruce Boeke, BLM-CFO archaeologist). It is recommended that an archaeological monitor be present during the erection of the fence and the initial construction related activities within 100 ft of the site. The total area surveyed is 8.84 acres, all of which is on land administered by the BLM-CFO.

Environmental Setting

The proposed well pad and access road are located in Eddy County, New Mexico, in topography that is comprised of very gentle rolling hills and small gravel ridges. The site is approximately 0.5 mile east of the Pecos River Valley. Soil is of the Reeves-Gypsum land-Cottonwood association: Loamy soils that are very shallow to moderately deep over gypsum beds, and Gypsum land. Elevation of the project area ranges from 3,338 to 3,343 feet above mean sea level. Vegetation associated with the project area is consistent with Chihuahuan Desert Scrub and includes creosote, mesquite, yucca, snakeweed, cane cholla, pencil cholla, prickly pear, horse crippler, and various grasses. Due to vegetative ground cover, surface visibility varied from 65to 75 percent. Faunal species include pronghorn antelope, mule deer, coyote, badger, cotton tail rabbit, jackrabbit, quail, roadrunner, pheasant, various snakes, small mammals, birds, and reptiles.

Methods

In this section of the report, procedures and standards used during fieldwork and for the completion of the report are identified and discussed.

Survey Methods

A Class III pedestrian archaeological survey of the project area was accomplished by walking parallel transects in a zig-zag pattern and spaced no greater than 15 meters. The BLM definition of an isolated manifestation (IM) was used, a definition that states that any cultural resource that has an occurrence of fewer than 10 artifacts (that predates 1952) and has no potential for subsurface archaeological deposits (BLM-CFO and BLM-RFO 1999). Each IM was recorded and the location plotted on the appropriate USGS Quadrangle map. The location was recorded using a hand held Garmin 12 Global Positioning System (GPS) unit. The unit has a margin of error of no more than 100 feet (30 meters). Isolated manifestations were recorded using the same analytical standards and level of detail as was used during site recording.

Site Recording and Artifact Analysis

After a site is encountered, artifacts are marked with pin-flags to help determine the distribution of the assemblage and to determine site boundaries. Sites are recorded using the Laboratory of Anthropology's Site Record Form (LA form) and Boone Archaeological Services artifact analysis forms. The center of the site is estimated and an aluminum numbered tag (field number and LA number)attached to a 12 inch metal spike is placed in a visible place on the ground. The location of the site datum, features, diagnostic artifacts, and site boundaries are recorded with a Garmin 12 GPS unit. If a site will be impacted by the proposed project, a reroute is surveyed and is marked with blue flagging tape. The reroute is recorded with a Garmin 12 GPS unit and is plotted on the project map. When previously recorded sites are encountered in the project area, a site update is performed. A sample of artifacts is recorded, making note of any

discrepencies between the original site discription and the current appearance of the site. Any changes are noted on the site map.

Boone Archaeological Services's artifact analysis form is designed to record artifact attributes that are the most useful in defining the type or use of an artifact. Attributes pertaining to lithic debitage include the flake type, degree of fragmentation, the amount of dorsal cortex, the type lithic material, size of the artifact, and information about the platform. The reduction stage associated with the flakes is noted. Cores are recorded as either unidirectional or multidirectional and the stage of reduction (tested, reduced, expended) is noted. The size and material type are also recorded. Non-diagnostic tools are recorded with regard to parent object (core, cobble, or flake), tool type, and edge angle. These are attributes cited by leading flintknappers and researchers as being relevant to determining the function, and in some cases the age or cultural affilation of the flaked stone assemblage (Whittaker 1994, Crabtree 1972, Turner and Hester 1993).

Although projectile point typologies for this region are incomplete, local researchers have developed techniques for determining approximate age categories (Katz and Katz 1985, Roney 1985). The technique is based on the measurement of neck width. The neck width decreases in size through time due to changes in hafting techniques (Roxlau 1997). Time frames that have been defined on this basis are as follows: less than 9 mm/late prehistoric (arrow point), 9 to 14 mm/Transitional Archaic, 13 to 16 mm/Late Archaic, 16 mm or greater/Middle Archaic or earlier. (Katz and Katz 1985).

All flaked stone artifacts are recorded using a size scale based on the artifacts's largest measurement in centimeters. The scale rounds up to the next whole centimeter and uses that number as the size category. Material type is also recorded for all lithic debitage, cores, and tools. Notes are taken if the artifact has any unique characteristics, such as heat treatment or flake terminations.

Ceramics are recorded by using known types and wares. If a ceramic type is not known, detailed notes are taken as to paste, temper, and surface treatment. Rim forms are photographed and noted, as they can be used to determine patterns of use and temporal affiliations.

Groundstone tools are recorded with regard to basic form (mano, metate, or pestle) and the specific type (milling slab, trough, basin, one or two hand mano, or bedrock metate). Formal shaping (pecking) is noted, as well as the material type and grain size. Condition of the tool is noted.

Thermal features (hearths) are recorded and plotted on the site map. The size, shape, and condition of the feature is noted. An approximate count of the pieces of fire-cracked rock or burned caliche is recorded, and at least one trowel test is performed to investigate the potential for subsurface archaeological deposits.

Historic artifacts are described by material type, original function (if known), and any identifying marks or characteristics. When recording glass or ceramic artifacts, maker's

marks can be compared to a published typology. Cans are identified by the size, shape, and sealing method (Simonis 1995).

Results

During the course of this survey one newly recorded BLM Category II site, LA 146897, and two previously recorded sites, LA 130663 & LA 130664, were encountered and recorded (or updated). LA 130663 & LA 130664 have been determined eligible for nomination to the NRHP under criteria d (BLM-CFO Agency Determination). Because LA 146897 has no further potential to provide further information (all observed artifacts were recorded), the site is recommended as not eligible for nomination to the NRHP.

Prefield Investigations

A prefield records search was conducted at the Bureau of Land Management-Carlsbad Field Office and the Archeological Records Management (ARMS) by means of an online database search. The database file search was configured using the Public Land Survey System (PLSS) legal location so that all or portions of Section 5, Township 17 South, Range 27 East was researched. There are four previously recorded sites plotted within 0.25 mile of the project area, LA 30598, LA 130663, LA 130664, and LA 142609. Two previously recorded sites are plotted within 500 ft of the project area, LA 130663 and LA 130664.

Recommendations

A 146897 is a newly recorded BLM Category II site that consists of a small lithic scatter. A shovel test revealed a sterile horizon of caliche at 4-5 cm subsurface. No subsurface archaeological deposits were observed during the test. All observed artifacts were recorded. Because potential for further information has been exhausted, LA 146897 is recommended as not eligible for nomination to the NRHP. Previously recorded BLM Category II sites LA 130663 & LA 130664 have been determined eligible for the NRHP (BLM-CFO Agency Determination).

References Cited

Crabtree, D.E.

1972 An Introduction to Flintworking. *Occasional Papers of the Idaho State University Museum No. 28.* Pocatello

Katz, Susanna and Paul Katz

1985 The History of the Carlsbad Basin, Southeastern New Mexico. Technical Report of Historic Archaeological Investigations in the Brantley Project Locality. Ms. On file, Bureau of Reclamation, Amarillo, Texas.

1993 *Archaeological Overview of Southeastern New Mexico.* New Mexico State Historic Preservation Division, Santa Fe.

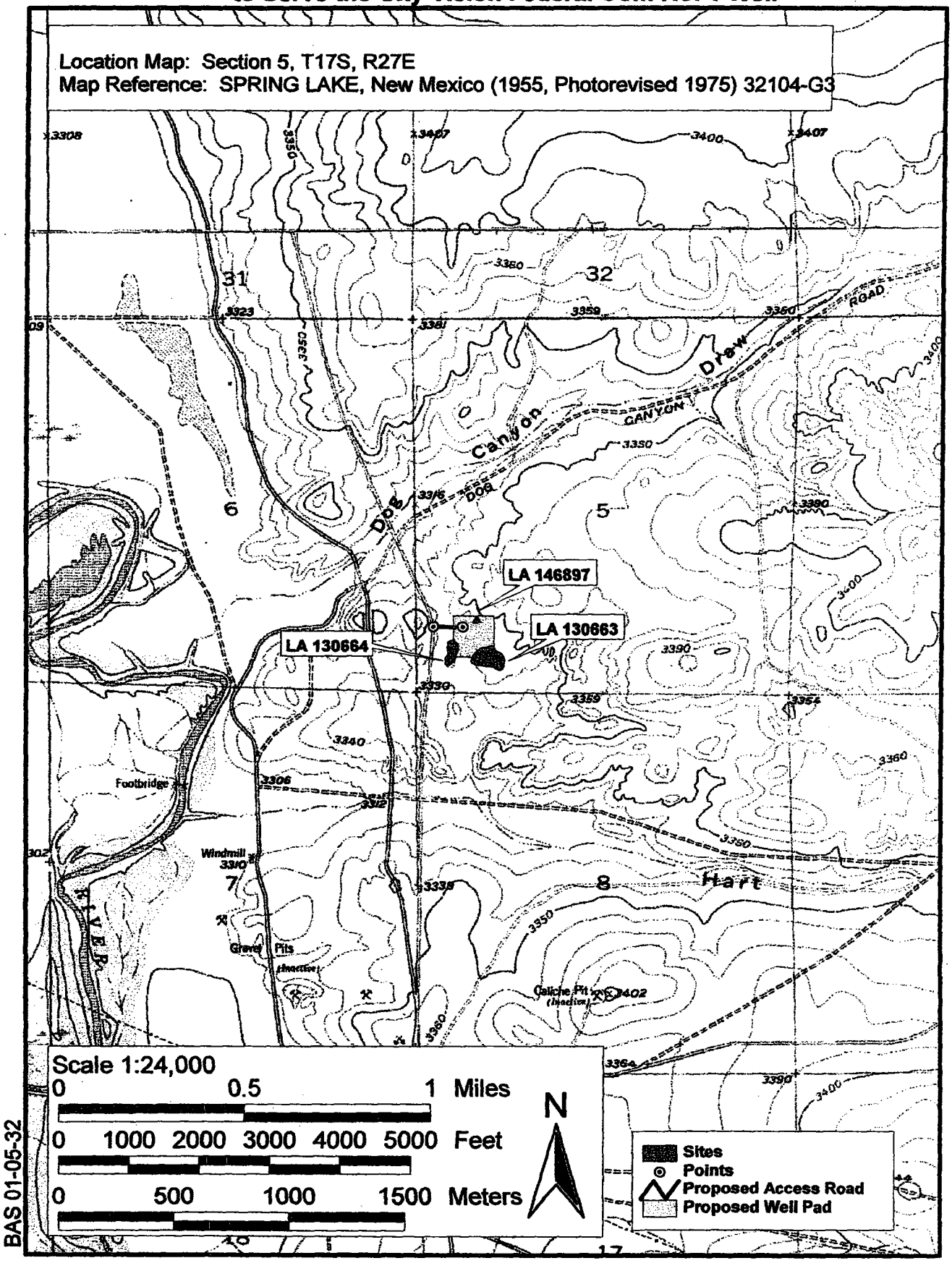
Leslie, Robert H.
1979 The Eastern Jornada Mogollon: Extreme Southeastern New Mexico (A Summary). In *Jornada Mogollon Archaeology: Proceedings of the First Jornada Conference*, edited by Patrick H. Beckett and Regge N. Wiseman, pp. 179-199. New Mexico Historic Preservation Division, Santa Fe.

Simonis, Don
1995 Can Chronology: Evaporated/Condensed Milk Can Measurements. Kingman Resource Area Bureau of Land Management.

Turner, S. and Thomas R. Hester
1993 *A Field Guide to Stone Artifacts of Texas Indians*, second edition. Gulf Publishing Company, Houston, Texas.

Whittaker, John C.
1994 Flintknapping: Making & Understanding Stone Tools. University of Texas Press. Austin, Texas.

Survey for Oxy U.S.A. W.T.P., LP's Proposed Access Road and Well Pad to Serve the Oxy Vision Federal Com No. 1 Well



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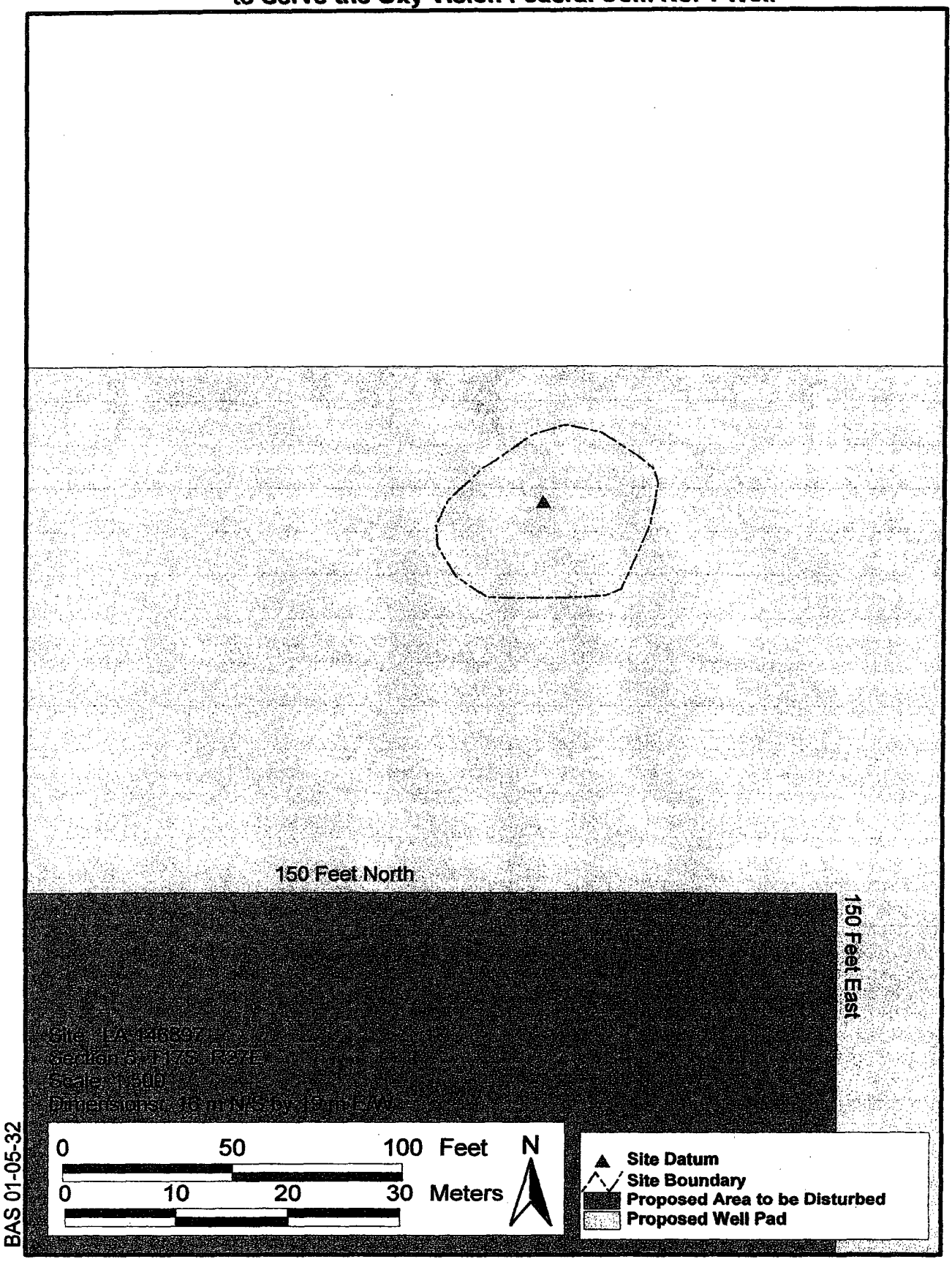

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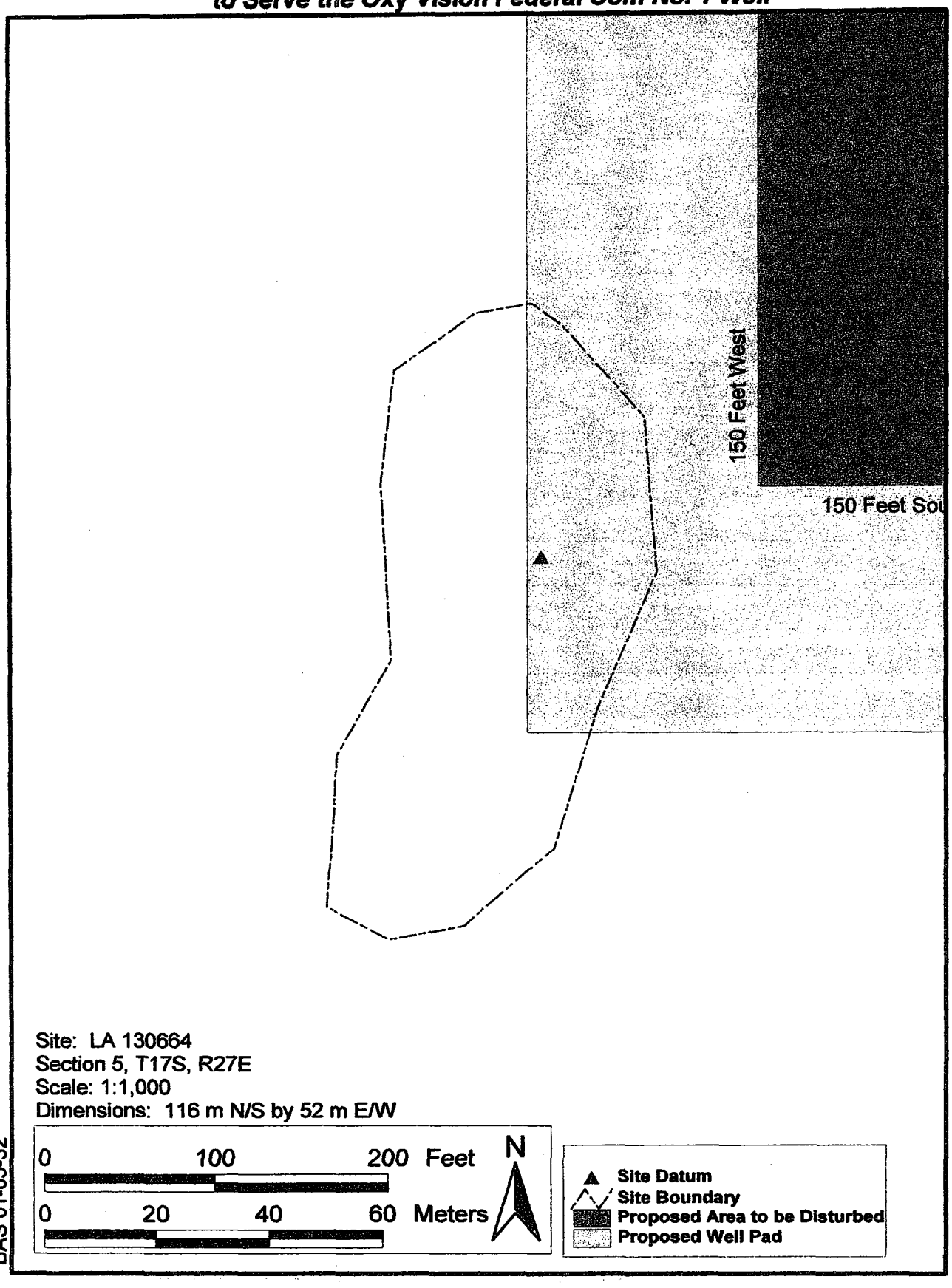

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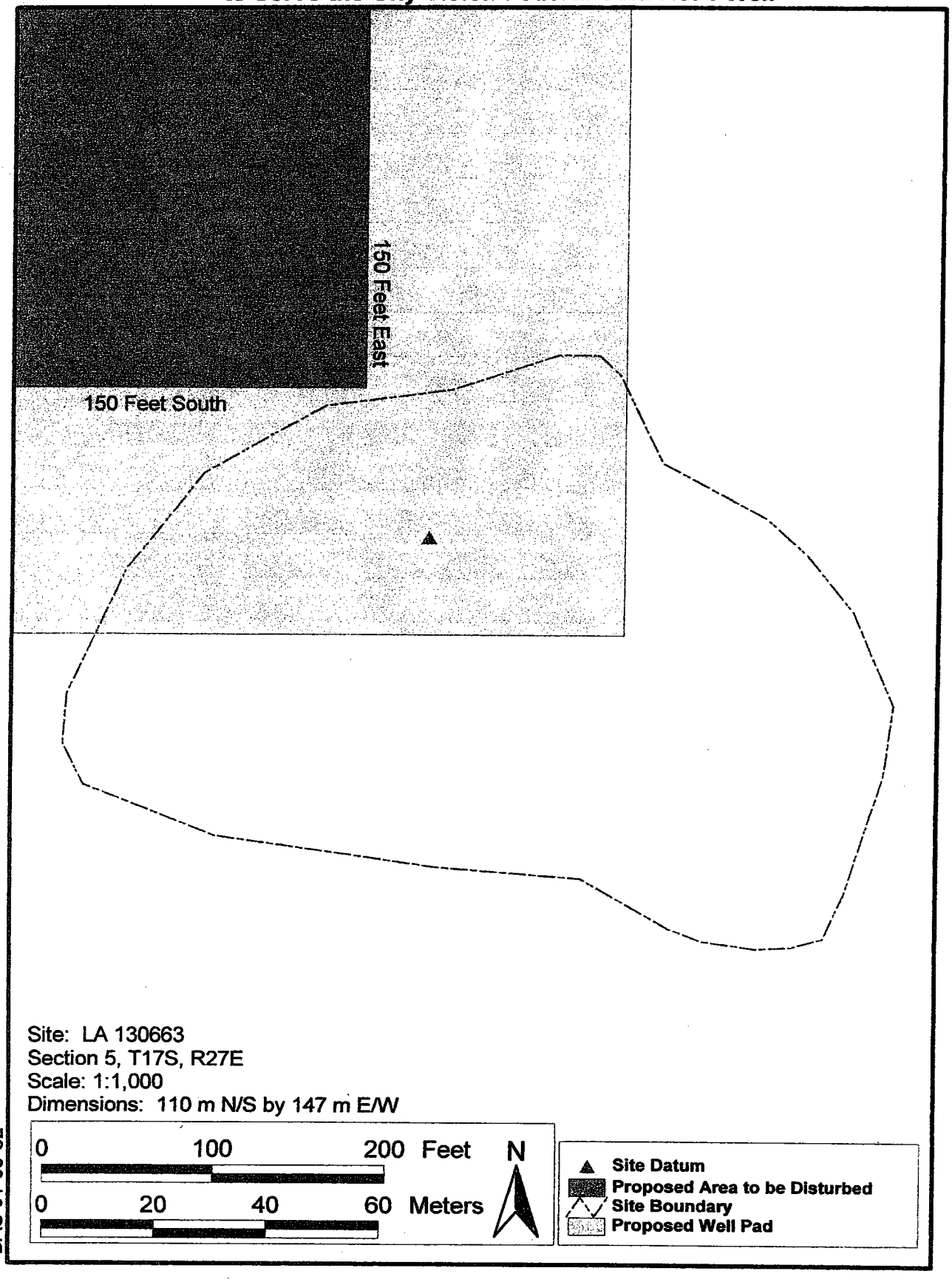


OXY USA WTP Limited Partnership
P.O. Box 50250, Midland, TX 79710-0250

February 15, 2005

United States Department of the Interior
Bureau of Land Management
Roswell District Office
2909 West Second Street
Roswell, New Mexico 88201

Re: Application for Permit to Drill
OXY USA WTP Limited Partnership
OXY Vision Federal #1
Eddy County, New Mexico
Lease No. LC-028375-B

Gentlemen:

OXY USA WTP Limited Partnership respectfully requests permission to drill our OXY Vision Federal #1 located at a surface location of 760 FSL and 810 FWL of Section 5, T17S, R27E, Eddy County, New Mexico, Federal Lease No. LC-028375-B. The proposed well will be drilled to a TD of approximately 9200' (TVD). The location and work area has been staked. It is approximately 5 miles northeast of Artesia, New Mexico.

In accordance with requirements stipulated in Federal Onshore Oil and Gas Order No. 1 under 43 CFR 3162.1, our Application for Permission to Drill and supporting evidence is hereby submitted.

I. Application for Permit to Drill:

1. Form 3160.3, Application for Permit to Drill.

2. Form C-102 Location and Acreage Dedication Plat certified by Gary G. Eidson, Registered Land Surveyor No. 12641 in the State of New Mexico, dated January 19, 2005.

3. The elevation of the unprepared ground is 3341 feet above sea level.

4. The geologic name of the surface formation is Permian Rustler.

5. Rotary drilling equipment will be utilized to drill the well to TD 9200' (TVD), and run casing. This equipment will then be rigged down and the well will be completed with a pulling unit.

6. Proposed total depth is 9200'(TVD).

7. Estimated tops of important geologic markers.

Wolfcamp	6000' TVD
Strawn	8100' TVD
Atoka	8500' TVD
Morrow	8900' TVD

8. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Primary Objective: Morrow 8900' TVD

Secondary Objective: Atoka 8500' TVD

9. The proposed casing program is as follows:

   Surface: 13-3/8" 48# H40 ST&C new casing set at 400'

   Intermediate: 9-5/8" 36# HCK/K55 ST&C new casing from 0-1800'

   Production: 5-1/2" 17# N80 LT&C new casing from 0-9200'

10. Casing setting depth and cementing program:

   A. 13-3/8" surface casing set at 400' in 17-1/2" hole. Circulate cement with 175sx HES light premium plus w/ 2% $CaCl_2$ followed by 250sx PP w/ 2% $CaCl_2$.

   If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C with 2% $CaCl_2$.

   B. 9-5/8" intermediate casing set at 1800' in 12-1/4" hole. Circulate cement with 365sx Interfill C w/ .25#/sx Flocele followed by 200sx PP w/ 2% $CaCl_2$.

   If hole conditions dictate, a DV tool may be run to ensure that the intermediate string is cemented to surface.

   If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C with 2% $CaCl_2$.

   Note: Cement volumes may be adjusted according to fluid caliper.

   C. 5-1/2" production casing set at 9200' in 8-3/4" hole. Cement with 805sx Interfill H w/ .1% HR-7 followed by 415sx Super H w/ .5% HR-344 + .4% CFR-3 + 5#/sx Gilsonite + 1#/sx salt + .2% HR-7.

   Estimated top of cement is 5400'.

   Note: Cement volumes may need to be adjusted to hole caliper.

11. Pressure Control Equipment

0-400'	None
400-1800'	13-3/8" 3M annular preventer, to be used as divertor only. Exhibit A
1800-9200'	11" 5000# ram type preventers with one set blind rams and one set pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 8000'. Exhibit A.

A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

After setting the 9-5/8" casing, the blowout preventers and related control equipment shall be pressure tested to 5000 psi. Any equipment failing to test satisfactorily shall be repaired or replaced. Results of the BOP test will be recorded in the Driller's Log. The BOP's will be maintained ready for use until drilling operations are completed.

BOP drills will be conducted as necessary to assure that equipment is operational and each crew is properly trained to carry out emergency duties.

Accumulator shall maintain a pressure capacity reserve at all times to provide for the close-open-close sequence of the blind and pipe rams of the hydraulic preventers.

12. Mud Program:

0-400'	Fresh water/native mud. Lime for pH control (9-10). Paper for seepage. Wt.8.7-9.2 ppg, vis 32-34 sec.
400-1800'	Fresh/*brine water. Lime for pH control (10-10.5). Paper for seepage. Wt. 8.3-9.0/10.0-10.1ppg, vis 28-29 sec. *Fresh water will be used unless chlorides in the mud system increase to 20000PPM.
1800-5800'	Fresh water. Lime for pH control (9-9.5). Paper for seepage. Wt. 8.3-8.5 ppg, vis 28-29 sec.
5800-7900'	Cut brine. Lime for pH control (10-10.5). Wt. 9.6-10.0 ppg, vis 28-29 sec.
7900-9200'	Mud up with an Duo Vis/Flo Trol system. Wt. 9.6-10.0 ppg, Vis 32-36sec, WL<10cc.

Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until the production casing is run and cemented. Monitoring equipment shall consist of the following:

1) A recording pit level indicator.

2) A pit volume totalizer.

3) A flowline sensor.

13. Testing, Logging and Coring Program:

    A. Testing program: No DST's are anticipated.

    B. Mud logging program: One-man unit from 6000' to TD.

    C. Electric logging program: CNL/LDT/CAL/GR, DLL/CAL/GR.

    D. Coring program: Possible sidewall rotary cores.

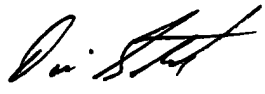
14. No abnormal temperatures, or H2S gas are anticipated. H2S Contingency Plan is attached per NMOCD requirements. The highest anticipated pressure gradient would be .55psi/ft. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

15. Anticipated starting date is April 15, 2005. It should take approximately 30 days to drill the well and another 10 days to complete.

16. The Multi-Point Surface Use & Operation Plan is attached.

17. If the Bureau of Land Management needs additional information to evaluate this application, please advise.

Very truly yours,



David Stewart
Sr. Regulatory Analyst
OXY USA WTP Limited Partnership

DRS/drs

Attachments