UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT OCD-ARTESIA

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

APPLICATION FOR PERMIT TO DRIL	5. Lease Seri NM - 153		•			
Ia. Type of Work X DRILL REEN	TER	JUL 1870	105	6. If Indian,	Allotee or	Tribe Name
lb. Type of Well ☐ Oil Well ☑ Gas Well ☐ Other		960-AH1			····	
On wen X Gas wen C Other	X Single Z	one Multiple Zo	ne	7. Unit or CA	A Agreem	ent Name and No.
2. Name of Operator				8. Lease Nan	ne and Wo	ell No. 3497
OXY USA WTP Limited Partnership Ba. Address	3h Di	192463 ione No. (include area co	oda)			us Federal #1
P.O. Box 50250 Midland, TX 79710-0250	30. FL	432-685-5717	ode)	0XY Fat 9. API Well 1 30-015	No. 2	
Location of Well (Report location clearly and in accordance with any S	itate equiremen	<u> 432-083-3717</u> ts)*				1215
At surface 660 FNL 1400 FEL NWNE(B)		70	310	10. Field and I Angell	Ranch	Atoka-Morrow
At proposed prod. zone		•		11.Sec., T., R	., M., or I	3lk. and Survey or Ar
	 			Sec 15	T19S	
4. Distance in miles and direction from nearest town or post office*		ts a		12. County or	Parish	13. State
12 miles southwest from 5. Distance from proposed*			1.5.0	Eddy		<u>NM</u>
location to nearest	16.100. 01 /	Acres in lease	17.Sp	acing Unit ded	icated to	this well
property or lease line, ft. 660' (Also to nearest drg. unit line, if any)		320		320		
8. Distance from proposed location* to nearest well, drilling, completed,	19. Propose	ed Depth	20. BI	BLM/BIA Bond No. on file		
applied for, on this lease, ft. N/A		10650' 6194690			0	
1. Elevations (Show whether DF, KDB, RT, GL, etc.	22. Approx	oximate date work will start* 23. Estimated duration			tion	
3496'		9/1/05			30	days
	24. Attachme	i semeli Ce	ntroff	od Water F	nioas	-
The following, completed in accordance with the requirements of Onshore C	oil and Gas Ord	er No. 1, shall be attache	d to this	s form:	2 00 00 1 T	
 Well plat certified by a registered surveyor. A Drilling Plan A Surface Use Plan (if the location is on National Forest System Lands, SUPO shall be filed with the appropriate Forest Service Office). 	the 5. C	sond to cover the operati tem 20 above). Operator certification. uch other site specific in uthorized officer.				
5. Signuature	Name (Printed	Typed)	-		Date	
Vi Stef	David Ste	wart			_	7(27/05
Title					!	
Sr. Regulatory Analyst						
Approved by (Signautre)	Name (Printed	(Typed)			Date	1111 1 5 2005
/s/ Joe G. Lara	/:	s/ Joe G. La	ra			JUL 1 5 2005
HAIN FIELD MANAGER	Office (CARLSBAD	FIEI	LD OF	FICE	
pplication approval does not warrant or certify that the applicant holds le						meiela elea annia

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)

WITNESS: 13 3/8" and 99/8" CEMENT JUAS

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Attachment 3160-3 OXY Fat Cactus Federal #1 660 FNL 1400 FEL NWNE(B) SEC 15 T19S R27E Eddy County, NM Federal Lease No. NM1530

PROPOSED TD:

10650' TVD

BOP PROGRAM:

0 - 400'None

400 - 2125'

13-3/8" 3M annular preventer, to be used as

divertor only.

2125 - 10650'

11" 5M blind pipe rams with 5M annular

preventer and rotating head below 7800'.

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 0-2125'

12-1/4" hole

Production:

5-1/2" OD 17# P110 LT&C new casing from 0-10650'

8-3/4" hole

CEMENT:

Surface - Circulate cement with 210sx HES light premium plus w/ 2%

CaCl₂ followed by 250sx PP w/ 2% CaCl₂.

Intermediate - Circulate cement with 505sx Interfill C w/ .25#/sx

Flocele followed by 200sx PP w/ 2% CaCl2.

Production - Cement with 1400sx Interfill H w/ .1% HR-7 followed by 380sx Super H w/ .5% HR-344 + .4% CFR-3 + 5#/sx Gilsonite + 1#/sx

salt + .2% HR-7. Estimated top of cement is 1900'.

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

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.

Fresh water. Lime for pH control(9-9.5). Paper

for seepage.

Wt 8.3-8.5 ppg, Vis 28-29 sec

5900 - 8600'.

Cut brine. Lime for pH control (10-10.5).

Wt 9.6-10.0 ppg, Vis 28-29sec

8600 - 10650'

Mud up with an Duo Vis/Flo Trol mud system.

Wt 9.6-10.0ppg, Vis 32-36sec, WL<10cc

nch Dr., Hobbs, NM 88240

W. Grand Avenue, Artesia, NM 88210 istrict 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 For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Form C-144

March 12, 2004

Type of action: Registration of a pit	or below-grade tank Closure of a pit or below	v-grade tank			
Operator: _OXY U.S.A. W.T.P. Limited PartnershipTelephone: 432.68 Address: _P.O. Box 50250 Midland, TX 79710					
Facility or well name: Fat Cactus Federal #1_API#: 30-015	U/L or Qtr/Qtr_ NWNE (B) Sec15_T_19 5	S_R_27 E			
County: Eddy Latitude32°39'57.89"N Longitude_104°15'	44.11"W NAD: 1927 🖾 1983 🔲 Surface Ow	mer Federal 🛭 State 🗌 Private 📗 Indian 🗌			
Pit Type: Drilling Production Disposal Workover Emergency Lined Unlined Liner type: Synthetic Thickness 12_mil Clay Volume 11,000 bbl	Below-grade tank Volume:bbl Type of fluid: Construction material: Double-walled, with leak detection? Yes If not, explain why not MAY 8 1 2005				
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) (0 points) 0			
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)	0			
If this is a pit closure: (1) attach a diagram of the facility showing the pit's onsite offsite If offsite, name of facility date. (4) Groundwater encountered: No Yes If yes, show depth belocations and excavations.	(3) Attach a general description of remedial	action taken including remediation start date and end			
I hereby certify that the information above is true and complete to the best of been/will be constructed or closed according to NMOCD guidelines , a Date: May 26, 2005	general permit, or an (attached) alternativ Signature relieve the operator of liability should the content	e OCD-approved plan			

State of New Mexico

R., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

CT II Grand avenus, artesia, nm 68210

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

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

DISTRICT IV	TATEL T	TAGAMITAN	4 5 7 7	4000400	DEDICAMICAL	TO T 4 4TH
DIDINICI II	W P. L.E.	LUCATION	ANII	ACREAGE	DEDICATION	PLAT
ARA A AR STANANA DA CAMPA WE ARE CORRE	.,	20011	441.4	TICITUL	DEDICITION	LIMI

☐ AMENDED REPORT

API Number	Pool Code	Pool N	ame
30-015-	70310		toka-Morrow
Property Code	Propert	Name	Well Number
	OXY FAT CAC	TUS FEDERAL	1
OGRID No.	Operato	Name	Elevation
192463	OXY U.S.A.	W.T.P., LP	3496'

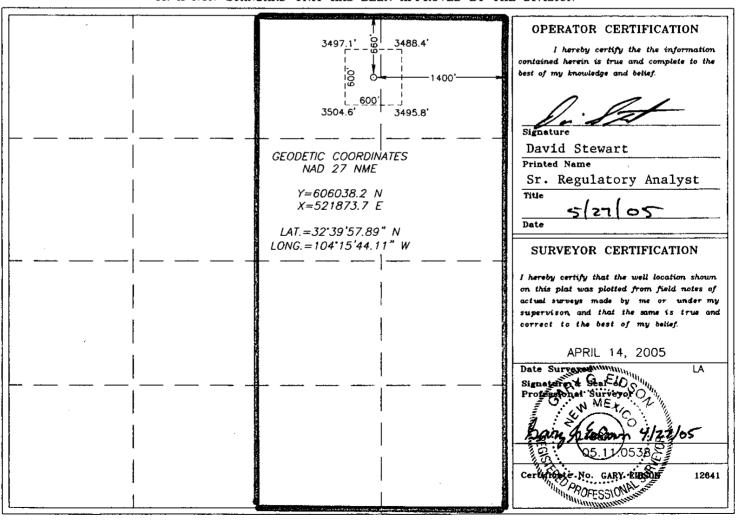
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	15	19-S	27-E		660	NORTH	1400	EAST	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
]									
ı	Dedicated Acres	Joint o	r Infill Co	nsolidation (Code Or	der No.				
	320	N			ĺ					

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



OXY USA WTP Limited Partnership N.O. Box 50250, Midland, TX 79710-0250 N.W. Oil Cons. DIV-Dist. 2

1301 W. Grand Avenueway 27, 2005 Artesia, NM 80210

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 Fat Cactus Federal #1
Eddy County, New Mexico
Lease No. NM-1530

Gentlemen:

OXY USA WTP Limited Partnership respectfully requests permission to drill our OXY Fat Cactus Federal #1 located 660 FNL and 1400 FEL of Section 15, T19S, R27E, Eddy County, New Mexico, Federal Lease No. NM-1530. The proposed well will be drilled to a TD of approximately 10650' (TVD). The location and work area has been staked. It is approximately 12 miles southwest 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.
 - 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 April 27, 2005.
 - 3. The elevation of the unprepared ground is 3496 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 10650' (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 10650' TVD.
 - 7. Estimated tops of important geologic markers.

 Wolfcamp
 7800' TVD

 Strawn
 9000' TVD

 Atoka
 9600' TVD

 Morrow
 10050' TVD

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

Primary Objective: Morrow 10050' TVD Atoka 9600'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# K55 ST&C new casing from 0-2125'

Production: 5-1/2" 17# P110 LT&C new casing from 0-10650'

10. Casing setting depth and cementing program:

A. 13-3/8" surface casing set at 400' in 17-1/2" hole. Circulate cement with 210sx HES light premium plus with 2% CaCl₂ + .25#/sx Flocele followed by 250sx PP with 2% CaCl₂ + .25#/sx Flocele.

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% CaCl₂.

B. 9-5/8" intermediate casing set at 2125' in 12-1/4" hole. Circulate cement with 505sx Interfill C with .25#/sx Flocele followed by 200sx PP with 2% CaCl₂.

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% CaCl₂.

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

C. 5-1/2" production casing set at 10650' in 8-3/4" hole. Cement with 1400sx Interfill H with .1% HR-7 followed by 380sx Super H with .5% HR-344 + .4% CFR-3 + 5#/sx Gilsonite + 1% salt + .2% HR-7.

Estimated top of cement is 1900'.

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

11. Pressure Control Equipment

0-400' None

400-2125' 13-3/8" 3M annular preventer, to be used as

divertor only. Exhibit A

2125-10650' 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 7800'. 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.
400-2125′	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.
2125-5900′	Fresh water. Lime for pH control (9-9.5). Paper for seepage. Wt. 8.3-8.5 ppg, vis 28-29 sec.
5900-8600′	Cut brine. Lime for pH control $(10-10.5)$. Wt. 9.6-10.0 ppg, vis $28-29$ sec.
8600-10650′	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.
- A pit volume totalizer.
- 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 September 1, 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

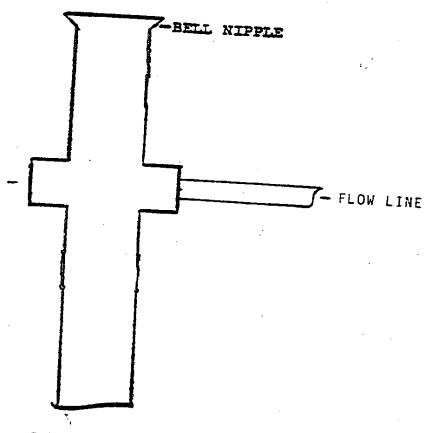
Sr. Regulatory Analyst

OXY USA WTP LP

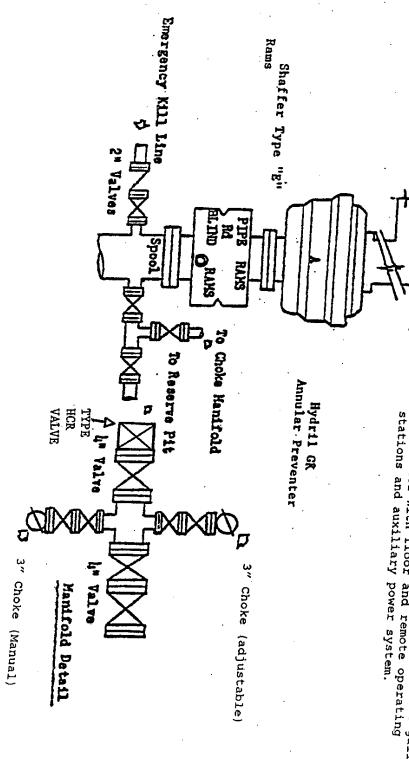
DRS/drs

Attachments

ANNULAR PREVENTOR
TO BE USED AS DIVERTOR ONLY



STARTING HEAD



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 Fat Cactus Federal #1 Eddy County, New Mexico Lease No. NM-1530

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

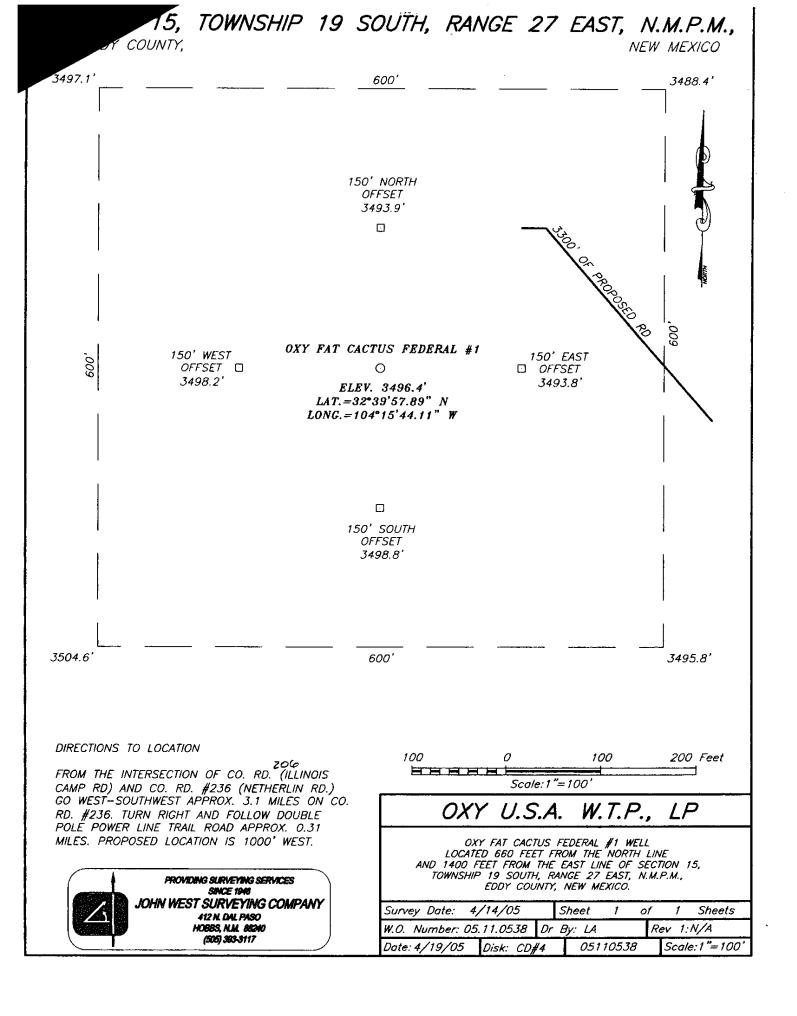
A copy of a USGS "Red Lake, SE New Mexico" quadrangle map is attached showing the proposed location. The well location is spotted on this map, which also shows the existing road system. Exhibit B.

Directions to location:

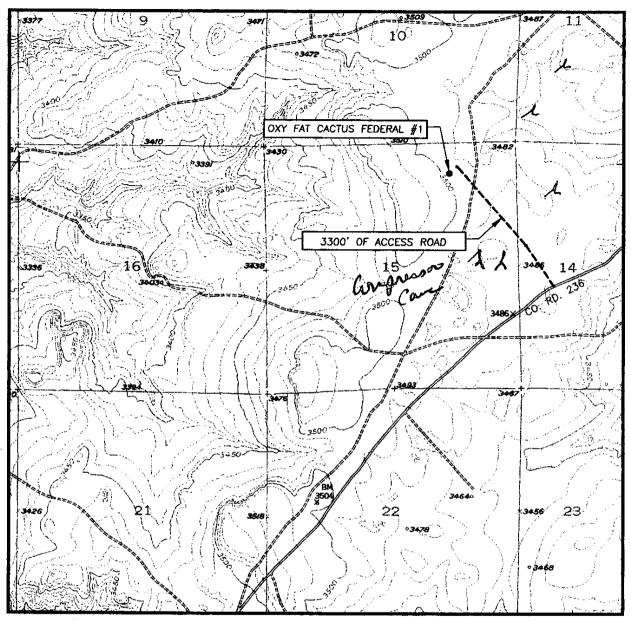
From the intersection of CR 206 and CR 236, go west-southwest on CR 236 for approximately 3.1 miles. Turn right and follow double pole power line trail road approx. 0.31 miles. Proposed location is 1000' west.

2. Planned Access Road

- A. A new access road will be built. The access road will run approximately 3300' northwest 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: None required
- 3. Existing wells within a one mile radius of the proposed development well are shown on Exhibit C.



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SPRING LAKE, N.M.

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

SEC. 15 TWP. 19—S RGE. 27—E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 1400' FEL

ELEVATION 3496'

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

LEASE OXY FAT CACTUS FEDERAL

U.S.G.S.—TOPOGRAPHIC MAP



PROVIDING SURVEYING SERVICES SINCE 1946 JOHN WEST SURVEYING COMPANY 412 N. DAI, PASO HOBBS, N.M. 80240 (506) 353-3117

SIL MID MODEL

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

Hydrogen Sulfide (H₂S) Contingency Plan

For

Oxy Fat Cactus Fed. No. 1 660 FNL, 1400 FEL Sec 15, T19S, 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.

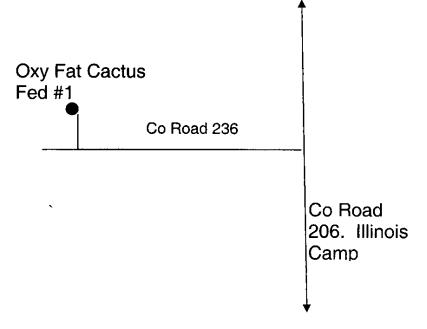
This Contingency Plan is intended for use on Oxy Downhole Services Group projects and the operations within their area of responsibility, such as drilling, critical well work, etc.

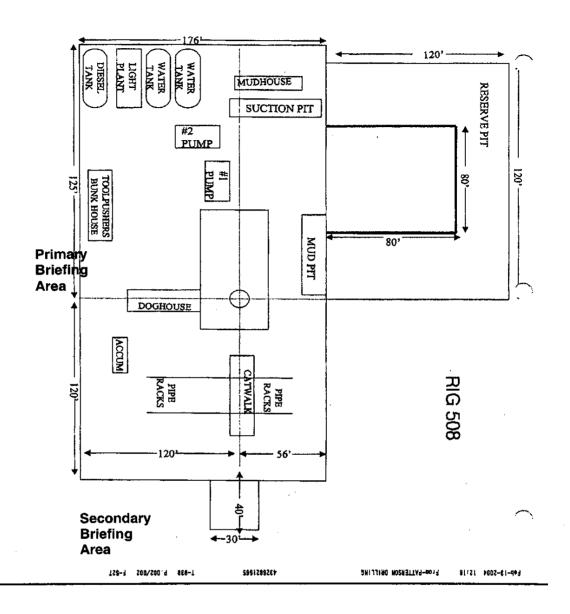
A copy of the Plan shall be maintained in the Top Dog House, Rig Managers trailer, and Company Representative's trailer if applicable.

Oxy Fat Cactus Fed. No. 1 Lat. 32° 39'57.89"N Long. 104° 15' 44.11"W NAD 27 NME Y = 606038.2 - N X = 521873.7 - E



From the intersection of County Road 206 and Co Road 236 go west -southwest 3.1 miles on Co Rd 236. turn right and follow the double power pole lines trail road 0.31 miles. Location is 1000' west.





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.
 - 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.
- 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:

 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	Chemical	Specific	Threshold	Hazardous	Lethal
Name	Formula	Gravity	Limit	Limit	Concentration
Hydrogen		1.189			
Sulfide	H ₂ S	Air = 1	10 ppm	100 ppm	600 ppm
Sulfur		2.21			
Dioxide	SO ₂	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.
- 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).
- 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:

 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.

<u>Derrickman:</u> (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 <u>NOT</u> 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	mary and the
Manager Operations				UELL	PAGER
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	713-312-8186
		 	Toledo Bend =	318-590-2349	
Operations Specialis	<i>is</i>				
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

Pub	lic 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

Emer <u>c</u>	jency 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 Leam Hotline Notification (713) 935-7210.

				CELL	PAGEF
Asset Management-Operations Area	as .		iting ke asa		en in broken
OXY Permian General Manager:	Houston	(281)	(281)	(713)	P. # 28. 12. 12. 12. 12. 12. 12. 12. 12. 12. 12
Tom Menges		552-1147	552-1484	560-8038	
South Permian Asset:	Midland	(432)	(432)	(432)	
Matt Hyde		685-5802	685-5930	556-5016	
John Nicholas		685-5600			
					PAGER
The state of the s	LOCATION	OFFICE	FAX	CELL	in invalue in
roduction Coordinators: S. Permiar	Asset	UFFICE	L Ax	CELL	HAGE
PERSON Production Coordinators: S. Permiar New Mexico: John Erickson	LASSET Hobbs	(505)	(505)	(505)	(505)

PERSON	LOGATION	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-
Frontier-New Mexico: Rick Kerby	Hobbs	(505) 393-2174	(505) 393-2671	(505) 390-8639	1118# (505) 370-6527

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

OXY USA WTP LIMITED PARTNERSHIP

Well Name & No.

1 – OXY FAT CACTUS FEDERAL

Location:

660' FNL & 1400' FEL - SEC 15 - T19S - R27E - EDDY COUNTY

Lease:

NM-1530

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: <u>13-3/8</u> inch <u>9-5/8</u> inch <u>5-1/2</u> inch

C. BOP tests

- 2 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

- 1. The 13-3/8 inch surface casing shall be set at 400 feet, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. The minimum required fill of cement behind the <u>9-5/8</u> inch intermediate casing is <u>circulate cement to</u> the surface. The 9-5/8 inch casing shall be set at 2100' and drilled with a fresh water mud system. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be <u>2000</u> psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the <u>9-5/8</u> inch casing shall be <u>3000</u> psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be cone by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the <u>Wolfcamp</u> Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- 1. Recording pit level indicator to indicate volume gains and losses.
- 2. Mud measuring device for accuracely determining the mud volumes necessary to fill the hole during trips.
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.