Form \$160-3 (August 1999) CAUGUST DEPARTMENT OF THE INT BUREAU OF LAND MANAG APPLICATION FOR PERMIT TO DRI	OCD-ARTESI	K - D6 E: 5. Lease Ser NM-128	OMB NO. 1004-0136 spires: November 30, 2000 ial No.
la. Type of Work X DRILL REE	NTER		Allotee or Tribe Name
lb. Type of Well 🔲 Oil Well 🕅 Gas Well 🗌 Other	X Single Zone Multiple Zo	ne 7. Unit or C.	A Agreement Name and No.
<ol> <li>Name of Operator         <ul> <li>OXY USA WTP Limited Partnership</li> <li>3a. Address</li> <li>P.O. Box 50250 Midland, TX 79710-0250</li> <li>4. Location of Well (Report location clearly and in accordance with any At surface 1381 FSL 1235 FWL NWSW(L)</li> </ul> </li> </ol>	192463 3b. Phone No. (include area c 432-685-5717 y State equirements)*	ode) 9. API Well 30 - 015 10. Field and	
At proposed prod. zone 660 FSL 660 FWL SWSW(M	n	11.Sec., T., I	R., M., or Blk. and Survey or A
14. Distance in miles and direction from nearest town or post office*		Sec 12 12. County or	T22S R24E
10 miles west from C	arlsbad. NM	Eddy	NM
15. Distance from proposed* location to nearest property or lease line, ft. SL-1235' BHL-660'	16. No. of Acres in lease	17. Spacing Unit de	
(Also to nearest drg. unit line, if any)	,320 646		640 320
<ol> <li>Distance from proposed location*</li> <li>to nearest well, drilling, completed,</li> <li>applied for, on this lease, ft.</li> </ol>	19. Proposed Depth	20. BLM/BIA Bon	d No. on file
3 · 1938 ' 7 · 2881 '	8600'(VD) 8950'(MD)		ES0136
21. Elevations (Show whether DF, KDB, RT, GL, etc. 3895'	22. Approximate date work will st 11/1/06	art* 23. Estin	nated duration 30 days
<ol> <li>A Drilling Plan</li> <li>A Surface Use Plan (if the location is on National Forest System Land SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>		nformation and/or pla	ns as may be required by the
25. Signuature	Name (Printed/Typed) David Stewart		Date Ef-15/06
Title Sr. Regulatory Analyst			
Approved by (Signautre) /s/ Tony J. Herrell	Name (Printed/Typed) /S/ Tony J. I	Ierrell	Date SEP 2 8 2006
FIELD MANAGER	Office CARLSBAD		ICE
Application approval does not warrant or certify that the applicant holds conduct operations thereon. Conditions of approval, if any, are attached.	APPi APPi	ROVAL FO	R 1 YEAR
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 12(2) make we United States any false, fictitious or fraudulent statements or representation	For the for any person knowlingly and that to any matter within its jurisdiction.	willfully to make to a	ny department or agency of
*(Instructions on Reverse)	APPROV	AL SUBJECT L REQUIREN STIPULATIC ED	ients and
WITNESS'	associati well, an	n pits are use on with the di OCD pit pern prior to pit c	rilling of this lit must be

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Attachment 3160-3 Shelby 12 Federal #8 SL-1381 FSL 1235 FWL NWSW(L) - BHL-660 FSL 660 FWL SWSW(M) SEC 12 T22S R24E Eddy County, NM Federal Lease No. NM-12828

PROPOSED TD: 8600' TVD 8950' TMD

1500' BOP PROGRAM: 0-1600' None 1500' 1600-8600' 11" 5M blind pipe rams with 5M annular preventer.

1500 CASING: 9-5/8" OD 36# K55 ST&C new casing from 0-1600 Surface: 14-3/4" hole

> Production: 7" OD 26# N80 LT&C new casing from 0-8600' 8-3/4" hole

Surface - DV Tool @ +/- 600', cement 1st stage with 515sx HES light CEMENT: premium plus w/ 2% CaCl<sub>2</sub> + .25#/sx Flocele followed by 250sx PP w/ 2% CaCl<sub>2</sub>. Cement 2<sup>nd</sup> stage with 340sx HES light premium plus w/ 2%  $CaCl_2 + .25\#/sx$  Flocele followed by 100sx PP w/ 2%  $CaCl_2$ .

> Production - DV Tool @ +/- 6000', cement 1st stage with 100sx(Foamed with Nitrogen) Premium Acid Soluble Cement w/ 2% Zonesealant 2000 followed by 350sx (Foamed with Nitrogen) Premium Cement w/ 2% Zonesealant 2000 followed by 150sx Super H Cement w/ .5% Halad(R) + .4% CFR-3 + 5#/sx Gilsonite + 1#/sx Salt + .25% HR-7. Cement  $2^{nd}$ stage with 410sx IFC cement w/ 5#/sx Gilsonite + .25#/sx Flocele followed by 100sx PP w/ 2%  $CaCl_2$ .

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

MUD:

Fresh water/native mud. Lime for pH control (9-10). Paper for seepage. Wt 8.7-9.2 ppg, Vis 32-34 sec

1500' 1-600-8600'

0-1600'

1500'

Mud up with an Duo Vis/Flo Trol mud system. Wt 9.6-10.0ppg, Vis 32-36sec, WL<10cc

DISTRICT I

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

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

#### State of New Mexico

Energy, Minerals and Natural Resources Department

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

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT IV 1220 S. ST. PRANCIS	DR., SANTA PR,	NM 87505	WELL LC	CAT	ION	AND ACREA	GE DEDICATI	ON PLAT	AMENDI	ED REPORT
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OGRID N						Operator Nam			Elevatio	
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	Section 12	Township 22-S	Range 24-E	Lot	ldn	Feet from the 1381	North/South line SOUTH	Feet from the	East/West line	County
		22 5	1					1235	WEST	EDDY
UL or lot No.	Section	Township	Range	Hole	· · · · · · · · · · · · · · · · · · ·		rent From Sur			
M	12	22-S	24-E	1.00		Feet from the 660	North/South line SOUTH	Feet from the	East/West line	County
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	1					OORDINATE'S 7 NME		i hereby shown on this	certify that the well plat was plotted from	location m field
						I		under my super	surveys made by m vision, and that the	same is
			1			66.8 N 76.0 E	,-	true and correc	t to the best of my	belief.
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#### MULTI-POINT SURFACE USE AND OPERATIONS PLAN

OXY USA WTP Limited Partnership Shelby 12 Federal #8 Eddy County, New Mexico Lease No. NM-12828

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

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A copy of a USGS "Azotea Peak, 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 285 and CR 406, go west-southwest on CR 406 approximately 2.0 miles. Turn left and go southwest approx. 6.7 miles. Turn right and go west approx. 0.21 miles. This location is approx. 500' south.

#### 2. Planned Access Road

- A. No new access road will be built. Exhibit B.
- B. Surfacing material: N/A
- C. Maximum Grade: N/A
- D. Turnouts: None needed
- E. Drainage Design: N/A
- F. Culverts: None needed
- G. Cuts and Fills: N/A
- H. Gates or Cattleguards: None required
- 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, existing production facilities will be utilized.
- 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 Shelby 12 Federal #8 tank battery. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

#### Multi-Point Surface Use and Operations Plan Shelby 12 Federal #8 Page 2

5. Location and Type of Water Supply

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Fresh water and brine water will be used to drill this well. It will be purchased and transported to the well site.

6. Source of Construction Materials

Caliche for surfacing the well pad will be obtained from the well site.

#### 7. Method of Handling Waste Disposal

- A. Drill Cuttings will be disposed of in an existing lined reserve 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 put in storage tanks and 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 north and the pits to the west. 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.

#### Multi-Point Surface Use and Operations Plan Shelby 12 Federal #8 Page 3

#### 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.

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- 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

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> The wellsite is on federal owned surface. The surface is leased to: The Travelstead Ranch, 573 Queen Hwy, Carlsbad, NM 88220. 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 3895'.
- B. Soil: Shallow, calcareous and grayish-brown, loose to slightly compact, stony silty loam overlying limestone bedrock. Slopes consist primarily of limestone rock and small pockets of colluvium and alluvium.
- 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: No residence within 2 miles.
- F. Archaeological, Historical and Cultural Sites: Cultural resources have been recorded in the area. Boone Archaeological Services, 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.

Multi-Point Surface Use and Operations Plan Shelby 12 Federal #8 Page 4

#### 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

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Calvin C. (Dusty) Weaver Operation Specialist P.O. Box 2000 Levelland, TX 79336 Office Phone: 806-229-9467 Cellular: 806-893-3067 Joe Fleming Drilling Coordinator P.O. Box 50250 Midland, TX 79710-0250 Office Phone: 432-685-5858

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.

8/15/2006

Scott Gengler

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



# Proposal

Report Date:	July 20, 2006	Survey / DLS Computation Method:	Minimum Curvature / Lubinski
Client:	OXY	Vertical Section Azimuth:	218.650°
Field:	Eddy County, NM	Vertical Section Origin:	N 0.000 ft, E 0.000 ft
Structure / Slot:	Shelby 12 Fed #8 / Shelby 12 Fed #8	TVD Reference Datum:	RKB
Well:	Shelby 12 Fed #8	TVD Reference Elevation:	0.0 ft relative to
Borehole:	Shelby 12 Fed #8	Sea Bed / Ground Level Elevation:	0.000 ft relative to
UWI/API#:		Magnetic Declination:	8.570°
Survey Name / Date:	Shelby 12 Fed #8_r1 / July 20, 2006	Total Field Strength:	49153.149 nT
Tort / AHD / DDI / ERD ratio:	12.000° / 920.72 ft / 4.048 / 0.107	Magnetic Dip:	60.316°
Grid Coordinate System:	NAD27 New Mexico State Planes, Eastern Zone, US Feet	Declination Date:	July 20, 2006
Location Lat/Long:	N 32 24 7.032, W 104 27 21.889	Magnetic Declination Model:	IGRF 2005
Location Grid N/E Y/X:	N 509966.800 ftUS, E 462116.000 ftUS	North Reference:	Grid North
Grid Convergence Angle:	-0.06577473°	Total Corr Mag North -> Grid North:	+8.636°
Grid Scale Factor:	0.99991073	Local Coordinates Referenced To:	Well Head

Comments	Measured Depth	Inclination	Azimuth	TVD	Vertical Section	NS	EW	Closure	Closure Azimuth	DLS	Tool Face
	(ft)	(deg)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(deg)	(deg/100 ft)	(deg)
ïe-In	0.00	0.00	218.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-141.35M
OP	3967.26	0.00	218.65	3967.26	0.00	0.00	0.00	0.00	0.00	0.00	-141.35M
	4000.00	0.65	218.65	4000.00	0.19	-0.15	-0.12	0.19	218.65	2.00	-141.35M
	4100.00	2.65	218.65	4099.95	3.07	-2.40	-1.92	3.07	218.65	2.00	-141.35M
	4200.00	4.65	218.65	4199.74	9.45	-7.38	-5.90	9.45	218.65	2.00	-141.35M
	4300.00	6.65	218.65	4299.25	19.30	-15.08	-12.05	19.30	218.65	2.00	0.00G
	4400.00	8.65	218.65	4398.36	32.62	-25.48	-20.37	32.62	218.65	2.00	0.00G
	4500.00	10.65	218.65	4496.93	49.39	-38.58	-30.85	49.39	218.65	2.00	0.00G
OC	4567.26	12.00	218.65	4562.88	62.60	-48.89	-39.10	62.60	218.65	2.00	0.00G
Disco	7968.71	12.00	218.65	7890.00	769.80	-601.23	-480.75	769.80	218.65	0.00	0.00G
BHL	8694.57	12.00	218.65	8600.00	920.72	-719.09	-575.00	920.72	218.65	0.00	0.00G

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Critical Points										
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+) / S(-)	E(+) / W(-)	DLS		
Tie-In	0.00	0.00	218.65	0.00	0.00	0.00	0.00	0.00		
кор	3967.26	0.00	218.65	3967.26	0.00	0.00	0.00	0.00		
EOC	4567.26	12.00	218.65	4562.88	62.60	-48.89	-39.10	2.00		
Cisco	7968.71	12.00	218.65	7890.00	769.80	-601.23	-480.75	0.00		
PBHL	8694.57	12.00	218.65	8600.00	920.72	-719.09	-575.00	0.00		







Critical Points										
<b>Critical Point</b>	MD	INCL	AZIM	TVD	VSEC	N(+) / S(-)	E(+) / W(-)	DLS		
Tie-In	0.00	0.00	218.65	0.00	0.00	0.00	0.00	0.00		
KOP	3967.26	0.00	218.65	3967.26	0.00	0.00	0.00	0.00		
EOC	4567.26	12.00	218.65	4562.88	62.60	-48.89	-39.10	2.00		
Cisco	7968.71	12.00	218.65	7890.00	769.80	-601.23	-480.75	0.00		
PB HL	8694.57	12.00	218.65	8600.00	920.72	-719.09	-575.00	0.00		







# **OXY USA WTP LIMITED PARTNERSHIP**

6 Desta Drive, Suite 600, Midland, Texas 79705 P.O. Box 50250, Midland, Texas 79710

Jim Spradlin Land Negotiator Office: 432.685.5708 Fax: 713.985.1285 e-mail: jim\_spradlin@oxy.com

July 11, 2006

Bureau of Land Management Carlsbad Field Office 620 East Greene Street Carlsbad, NM 88220

Attn: Linda Denniston

RE: Shelby 12 Fed #8 SL-1381 FSL x 1235 FWL NWSW(L) BHL-660 FSL x 660 FWL SWSW(M) S/2 of Section 12, T22S, R24E Eddy County, NM

## **STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS**

OPERATOR NAME: ADDRESS: OXY USA WTP Limited Partnership 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.: NM-12828

LEGAL DESCRIPTION: S/2 of Section 12, T22S, R24E Eddy County, NM

FORMATIONS:

**BOND COVERAGE:** 

Nationwide

ES 0136

BY:

None

BLM BOND FILE NO.:

OXY USA WTP Limited Partnership

Jim Spradlin

AUTHORIZED SIGNATURE:

**TITLE: Land Negotiator** DATE: July 11, 2006

cc: David Stewart

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

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# Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan

For

Shelby 12 Federal 8 1381 FSL, 1235 FWL Sec 12, T22S, R24E Eddy County, NM

And

Patterson Rig #503

1/16

# TABLE OF CONTENTS

ITEM	PAGE
PREFACE	. 3
	. 4
RIG SKETCH	. 5
EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES	6
SPECIFIC EMERGENCY GUIDANCE - H2S Release - Well Control	. 8 . 10
PUBLIC RELATIONS	. 13
PHONE CONTACTS – OP DOWNHOLE SERVICES GROUP	. 14
EMERGENCY PERSONELL NOTIFICATION NUMBERS	. 15
PHONE CONTACTS – OP PRODUCTION AND PLANT PERSONNEL	. 16
PHONE CONTACTS – OP HES PERSONNEL	. 16

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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.



**DIRECTIONS TO LOCATION:** From the intersection of USH 285 and CR 406, go west-southwest on CR 406 approximately 2.0 miles. Turn left and go southwest approx. 6.7 miles. Turn right and go west approx. 0.21 miles. This location is approx. 500' south.



Patterson/UTI 503

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# 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.

Patterson/UTI 503



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**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:

 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.

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H2S	1.189 Air = 1	10 ppm	100 ppm	600 ppm
Sulfur Dioxide	SO2	2.21 Air = 1	2 ppm	N/A	1000 ppm

Characteristics of H2S and SO2

## **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

# <u>Driller:</u>

- 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)

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## **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.



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# **OXY PERMIAN DOWNHOLE SERVICES GROUP**

	LOCATION	OFFICE	HOME	CELL	PAGER
Manager Operations S	upport				왕과 명이 있는 것 금속하다. 고
Hardesty, Steve	Midland	432-685-5880	432/694-6441	713-560-8095	
Team Leader					
Thompson, Tommy	Midland	432-685-5877	432/699-4383	432-664-4214	
<b>Operations Specialists</b>				and the second second	<u> </u>
Fleming, Joe	Midland	432-685-5858	432/699-0875	432-425-6075	
Ray, Fred	Midland	432-685-5683	432/362-2857	432-661-3893	
HES Tech					
Thompson, Don	Midland	432-685-5719	432/684-3900	432-556-1505	

# **Emergency** Notification Numbers

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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 Ei	nergency 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 OFFICE FAX CELL PAGER

Asset Management-Operations Areas		an a	na program de la casa de la casa Novas de la casa de la c		
OXY Permian General Manager:	Houston	(281)	(281)	(713)	
Tom Menges		552-1147	552-1484	560-8038	
South Permian Asset:	Midland	(432)	(432)	(432)	
Matt Hyde		685-5802	685-5930	556-5016	

Frontier RMT:	Midland	(432)			
John Nicholas		685-5600			
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PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
Production Coordinators: S. Permian Asset	т., (ся	and the second			
New Mexico: John Erickson	Hobbs	(505)	(505)	(505)	(505)
40)		393-2174	397-2671	390-6426	370-6836

PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
HES Coordinators & Area of Responsibility			ga ang ang		
Frontier: Eddy Gonzales	Midland	(432) 685-5929	(432) 685-5742	(432) 556-6790	
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



OXY USA WTP Limited Partnership

P.O. Box 50250, Midland, TX 79710-0250

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August 15, 2006

United States Department of the Interior Bureau of Land Management Carlsbad District Office 620 East Greene Street Carlsbad, New Mexico 88220

Re: Application for Permit to Drill OXY USA WTP Limited Partnership Shelby 12 Federal #8 Eddy County, New Mexico Lease No. NM-12828

Gentlemen:

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OXY USA WTP Limited Partnership respectfully requests permission to drill our Shelby 12 Federal #8 located at a surface location of 1381 FSL and 1235 FWL and a proposed bottom-hole location of 660 FSL 660 FWL of Section 12, T22S, R24E, Eddy County, New Mexico, Federal Lease No. NM-12828. The proposed well will be drilled to a TD of approximately 8600' (TVD) and 8950' (TMD). The location and work area has been staked. It is approximately 10 miles west of Carlsbad, 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 May 16, 2006.
  - 3. The elevation of the unprepared ground is 3895 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 8600' (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 8600'(TVD) and 8950'(TMD).
  - 7. Estimated tops of important geologic markers.

Delaware	1620′	TVD
Bone Spring	3850′	TVD
Wolfcamp	7550 <i>'</i>	TVD
Cisco-Canyon	7850′	TVD

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

Primary Objective:	Cisco-Canyon	7850′	TVD
Secondary Objective:	Wolfcamp	75501	TVD

#### APD - Shelby 12 Federal #8 Page 2

9. The proposed casing program is as follows:

Surface: 9-5/8" 36# K55 ST&C new casing set at 1600' Production: 7" 26# N80 LT&C new casing from 0-8600'

- 10. Casing setting depth and cementing program:
  - A. 9-5/8" surface casing set at 1600' in 12-1/4" hole. DV Tool @ +/- 600', cement 1<sup>st</sup> stage with 515sx HES light premium plus w/ 2% CaCl<sub>2</sub> + .25#/sx Flocele followed by 250sx PP w/ 2% CaCl<sub>2</sub>. Cement 2<sup>nd</sup> stage with 340sx HES light premium plus w/ 2% CaCl<sub>2</sub> + .25#/sx Flocele followed by 100sx PP w/ 2% CaCl<sub>2</sub>.

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<sub>2</sub>.

- B. 7" production casing set at 8600' in 8-3/4" hole. DV Tool @ +/- 6000', cement 1<sup>st</sup> stage with 100sx(Foamed with Nitrogen) Premium Acid Soluble Cement w/ 2% Zonesealant 2000 followed by 350sx (Foamed with Nitrogen) Premium Cement w/ 2% Zonesealant 2000 followed by 150sx Super H Cement w/ .5% Halad(R) + .4% CFR-3 + 5#/sx Gilsonite + 1#/sx Salt + .25% HR-7. Cement 2<sup>nd</sup> stage with 410sx IFC cement w/ 5#/sx Gilsonite + .25#/sx Flocele followed by 100sx PP w/ 2% CaCl<sub>2</sub>.
  - Note: Cement volumes may need to be adjusted to hole caliper.
- 11. Pressure Control Equipment

0-1600' None

1600-8600'

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. 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:

0-1600′	Fresh water/native mud. Lime for pH control (9-10). Paper for seepage. Wt.8.7-9.2 ppg, vis 32-34 sec.
1600-8600ʻ	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.
  - 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 November 1, 2006. 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,

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David Stewart Sr. Regulatory Analyst OXY USA WTP Limited Partnership

#### SPECIAL DRILLING STIPULATIONS FOR THE EAST INDIAN BASIN OIL FIELD DEVELOPMENT

#### THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

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OPERATOR'S NAME	OXY USA WTP, L.P.			
WELL NAME & No.	Shelby 12 Fed. #8			
LOCATION 1381	F_S_L&_1235 F_W_L, SEC	<u>12 , T 22</u>	S, R24E	Ξ
LEASE NO. NM-1282	28 COUNTY Eddy	STATE	NEW MEXICO	
Bottom Hole: 660 FSL	& 660 FWL, Section 12, T. 22 S., R. 24 E.			

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management (BLM) office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination, whichever is shorter.

1. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(x) The BLM will monitor construction of this drill site. Notify the Carlsbad Field Office at (505) 234-5972, at least three (3) working days prior to commencing construction.

(x) Roads and the drill pad fort his well must be surfaced with a minimum of \_\_\_\_4\_\_\_ inches of compacted caliche.

(x) The holder shall comply with the terms, conditions, and stipulations for drilling sites in the Azotea Mesa portion of the East Indian Basin development area, as listed below:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et. seq.) with regard to any toxic substances that are used, generated by or stored on the rights-of-way or on facilities authorized by this grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et. seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et. seq.) on the rights-of-way (unless the release or threatened release is wholly unrelated to the rights-of-way holder's activity on the rights-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the well site, any oil or other pollutant should be discharged, impacting Federal lands, the control and total

removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting there from, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

5. The holder shall conduct all activities associated with the construction, operation, and termination of the rights-of-way within the authorized limits of the rights-of-way.

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6. No well or plant sites will be allowed on slopes over 20 percent. Other use or occupancy on slopes over 20 percent would be limited. Uses permitted might include mineral material extraction sites, surface pipelines, projects designed to enhance or protect renewable natural resources, or other uses as approved by the Authorized Officer (AO). Projects on these steep grades will be considered on a case-by-case basis, and may require special conditions or stipulations for slope mitigation.

7. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair impacted improvements to at least their former state. The holder shall contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence will be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed in existing fences unless approved by the Authorized Officer.

8. All above-ground structures not subject to safety requirements shall be painted by the holder to reduce visual contrasts and to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee. The colors selected for this project include: ( ) A "Carlsbad Canyon" (Munsell Soil Color Chart [MSCC] Number 2.5Y 6/2). (X ) B "Shale Green" [MSCC] Number 5Y 4/2), ( ) C "Desert Brown" [MSCC] Number 10YR 6/3), and ( ) D "Juniper Green" [no MSCC Number], the color(s) for individual facilities will be specified depending on the site-specific contrasts caused by the individual action. Exceptions to these color requirements may be authorized on a case-by-case basis, if determined to be more effective in meeting site-specific VRM objectives, such as for power poles, fence posts, signs, etc.

9. The holder shall take whatever steps are necessary to ensure that non-road rights-of-way are not used as roadways. The holder shall not use non-road rights-of-way as roads or access for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Stacks on heater-treaters/separator-dehydrators will be required to be covered to prevent mortality of avian species including neotopical migrants and bats.

12. The BLM will be informed at least two (2) working days prior to any blasting. Notifications of blasting should include the purpose and location of the blasting, the intended date and duration of the blasting, and the estimated volume of the excavation or cut and/or fill.

13. The site will be maintained in neat and orderly condition at all times. All waste materials, both liquid and solid, shall be disposed of promptly at an appropriate, authorized waste disposal facility in accordance with all applicable State and Federal laws. "Waste" means all discarded matter including, but not limited to, human refuse, trash, garbage, debris, petroleum products, brines, chemicals, oil drums, ashes, and equipment. No waste shall be buried on site.

14. In those areas where erosion control structures are required to stabilize soil conditions, the holder shall install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound management practices. Any earth work will require prior approval by the Authorized Officer.

15. The holder shall reseed all surface disturbed by construction activities. If reseeding is required, it will be done according to the attached seeding requirements, using the native seed mixture specified.

16. Upon completion of initial construction, the holder will promptly reclaim disturbed areas not necessary for continuing facility operation.

17. Closed circulation systems (steel pits) may be required on steeper slopes, on locations with restricted available area, in rocky zones where digging a pit could involve rock saws or blasting, or in other areas of special concern as determined by the BLM AO in consultation with Industry. Cuttings will be placed in permanent, lined pits, located by the BLM and Industry representatives during the initial on-site BLM-Industry meeting.

When reserve (mud) pits are used, they will be constructed as per the decisions made at the initial on-site meeting between industry and BLM. Pits will be lined with heavy (8 mil) pit liners which are never to be breached. Berms, sufficient to contain any spills or water flows and preferable made from excavated pit material, will be constructed around the pits. Relocation or reorientation of pits, or modified "V" pits, may be required at certain locations. Padding material, such as sand, dirt fines, or straw, may be required to prevent punctures in the bottom of the pit liners.

During reclamation the pits will be allowed to dry, then the liners will be folded over the pit sediments, and the pit will be backfilled. No pit will be drained and no pit liner will be broken. An examination and approval by a BLM representative will be required prior to closure of any reserve pit.

18. BLM will require prompt notification by the operator of any bit drops of four feet or more accompanied by circulation losses greater than 75 percent.

19. To minimize potential impacts to subsurface resources from well drilling, casing, or cementing, the BLM may require specific procedures, such as fresh water drilling in certain zones, special cement additives or sweeps, or cementing casing to the surface. These procedures, if required, will be determined by the BLM Fluid Minerals staff in consultation with the operator.

20. To minimize potential problems due to casing and cementing, the BLM may require the following actions as determined by BLM and the operator.

(1) Use of cement baskets, external casing packers, multiple-staged and/or remedial cementing to isolate voids encountered:

(2) Use of special cements or cement additives to combat lost circulation;

(3) Use of cement evaluation tools;

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(4) Cementing all casing strings to surface.

21. Permanent under-liners and berms sufficient to contain any spills will be built under and around storage tanks.

22. If, during on-site inspection, it is determined that surface disturbing activities must be conducted in areas of possible T&E plant habitat (limestone shelves or rocky outcroppings), a T&E species survey may be required prior to authorization of any surface disturbing activities.

23. Cleanup of spills in excess of state-reportable levels should be accomplished using bioremediation techniques rather then by removing contaminated soil. If measures other than bioremediation are required for individual spill sites, these special techniques will be approved by the Authorized Officer, BLM, in consultation with the companies.

24. A sales contract for removal of mineral material (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM <u>prior to commencing</u> <u>construction</u>. Contact the BLM solid minerals staff for the various options to purchase mineral material.

25. Caliche pits will be reclaimed by sloping their walls, replacing the topsoil, and seeding. In some cases, caliche removed from other sites may be returned, depending on the condition of the caliche.

26. Abandoned surface pipelines and other above-ground equipment will be removed promptly once these are no longer needed, buried pipelines will be flushed and left in placed.

27. Sites built on cut-and-fill will be recontoured to blend into the surrounding natural terrain, as nearly as feasible.

28. Special Stipulations:

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() A. On a case-by-case basis, BLM may require gates on, or physical restriction to, any new or upgraded road constructed to provide access to a new facility within the study area. The gates or physical barrier would remain closed and locked at all times and access would be granted only to essential company and BLM personnel. This restriction could help to protect important cultural and archaeological sites, as well as wildlife, watershed, and recreation values.

() B. To maintain Visual Resources along State Highway 137, screening with planting or natural or man-made materials, such as berms or fencing may be required at some locations.

(x) C. Padding material, such as sand, dirt fines, or straw, will be required to prevent punctures in the bottom of the pit liners.

(x) D. Other. V-Door North (Pits to the West). See also attached Cave/Karst stipulations.

#### II. WELL COMPLETION REQUIREMENTS

() A Communization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(x) Surface Restoration: When the well is completed, the reserve pit(s) will be dried and backfilled, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be recontoured and reclaimed to resemble the original contours of the surrounding terrain and reclaimed as per stipulation number 20. The disturbed area will be reseeded with the following seed mixture, in pounds of Pure Live Seed (PLS) per acre.

(Pounds of Pure Live Seed: Pounds of seed x percent purity x percent germination = Pounds Pure Live Seed.)

() A. Seed Mixture 1 (Loamy Sites)		() B. Seed Mixture 2 (Sandy Sites	
Sand dropseed (Sporobolus cryptandrus0	1.00	Sand dropseed (Sporobolus crytandrus)	1.00
Sideoats grama (Bouteloua curtipendula)	5.00	Four-wing saltbush DWS* (Atriplex canescens)	8.00
Winterfat (Ceratoides lanata) OR	1.00	Plains bristlegrass (Setaria macrostachya) OR	5.00
Mountain Mahogany (Cerocarpus nontanus OR	) 1.00	Desert globmallow (Sphaeralcea ambigua) OR	0.25
Apache plume (Fallugia paradoxa)	2.00		
(X) C. Seed Mixture 3 (Shallow Sites)		() D. Seed Mixture 4 (Gypsum Sites)	
(X) C. Seed Mixture 3 (Shallow Sites) Sideoats grama (Bouteloua curtipendula)	7.00	() D. Seed Mixture 4 (Gypsum Sites) Alkali Sacaton (Sporobolus airoides)	1.50
Sideoats grama (Bouteloua curtipendula) Plains Bristlegrass (Setaria macrostrachya) OR Bottlebrush squirrel tail (Sitanion heptrix)	5.00 5.50	Alkali Sacaton (Sporobolus airoides)	
Sideoats grama (Bouteloua curtipendula) Plains Bristlegrass (Setaria macrostrachya) OR	5.00 5.50	Alkali Sacaton (Sporobolus airoides)	

Seeding should be done either late in the fall (September 15 – November 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture.

(x) Special: BLM's objective through this mitigative process is to restore disturbed surfaces to a condition as similar to their original state as is feasible and/or blend these areas into the surrounding landscape. To achieve that objective, the following is a list of rehabilitation or reclamation methods that will be considered, in addition to standard procedures, as appropriate for each disturbed area:

(  ${\bf x}\,$  ) Removal of caliche or other surfacing materials, these materials may be used to fill cuts for restoration or returned to the caliche pits, if the caliche is acceptable:

( ) Special seed bed preparation and seeding methods;

() Soil amendments, soil treatments, and fertilizers;

() Planting trees and shrubs (from seeds);

() Mulching;

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() Initial watering;

() Erosion control and land treatments;

() Special Fencing;

(x) Other. See attached Visual Resource Stipulations

# Conditions of Approval Cave and Karst

EA#: NM-080-06-1269 Lease #: NM-12828 OXY USA WTP, L.P. Shelby 12 Fed. #8

# **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### **Berming:**

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

#### **Buried Cuttings Pit:**

A 70X100 foot cuttings pit will be utilized for this location. The cuttings pit will be lined with 4 oz. felt and a layer of 20 mil. plastic. Upon completion of the well all excess fluids will be vacuumed off the cuttings pit and allowed to dry. The pit liner will then be folded over the cuttings, covered with a 20 mil plastic cover and then covered with at least three feet of top soil.

#### **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

#### **Rotary Drilling with Fresh Water:**

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. See geologist report for depth.

#### **Directional Drilling:**

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone as identified in the geologic report.

#### **Casing:**

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

#### **Cementing:**

All casing strings will be cemented to the surface.

#### Lost Circulation:

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ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cavebearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

#### **Delayed Blasting:**

Any blasting will be a phased and time delayed.

#### Abandonment Cementing:

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

#### **Pressure Tests:**

Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

#### **Differential Shut-off Systems:**

A leak detection system and differential shut off systems will be installed for pipelines and tanks used in production or drilling.

#### **Record Keeping:**

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

## VISUAL RESOURCES STIPULATIONS

The proposed project is located within a Class Three Visual Resource Area. The project will be built in a manner to minimize visibility. The proposed project will be a linear feature for the life of the project, impacting visual resources.

#### **Surface Mitigation**

The following stipulations will apply to minimize impacts during construction, drilling and production.

- 1. The proposed construction will be limited to the approved pad size.
- 2. All above ground facilities, structures, appurtenances, and pipelines will be low profile (less than 10 feet in height).
- 3. All above ground facilities, structures, appurtenances, and pipelines will be painted with the non-reflective (flat) paint color Shale Green.
- 4. Any existing tanks will be replaced with a low profile tank and painted the same color as the proposed tanks.
- 5. Upon completion of the well and installation of the production facilities (if the well is a producer) the pad will be reclaimed back to a size necessary for production operations only. The edges will be recontoured and the extra caliche and pad material will be hauled off-site. After one year, the BLM may require reclamation.
- 6. The reclaimed area will be grid rolled and reseeded.

#### **CONDITIONS OF APPROVAL - DRILLING**

#### Operator's Name: <u>OXY USA WTP Limited Partnership</u> Well No. <u>8 – Shelby 12 Federal</u> Location: <u>SH: 1381' FSL & 1235' FWL BH: 660' FSL & 660' FWL</u> sec. <u>12</u>, T. <u>22 S.</u>, R. <u>24 E.</u> Lease: <u>NM-12828</u>

#### **I. DRILLING OPERATIONS REQUIREMENTS:**

1. The Bureau of Land Management (BLM) is to be notified at (505) 361-2822 in sufficient time for a representative to witness:

A. Spudding

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B. Cementing casing: <u>9-5/8</u> inch 7 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. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.

4. A Hydrogen Sulfide Contingency Plan should be activated prior to drilling in the <u>Upper Penn</u> formation. A copy of the plan shall be posted at the drilling site.

#### **II. CASING:**

1. <u>9-5/8</u> inch surface casing should be set <u>at approximately 1500 feet</u>, below usable water and circulate cement to the surface. If cement does not circulate to the surface, the BLM Carlsbad Field Office shall be notified at (505) 361-2822 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. Minimum required fill of cement behind the <u>7</u> inch production casing is <u>sufficient to tie back 500 feet above the</u> <u>uppermost perforation in the pay zone.</u>

#### **III. PRESSURE CONTROL:**

1. Before drilling below the 9-5/8 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.

#### **CONDITIONS OF APPROVAL – DRILLING (CONTINUED)**

## Operator's Name: <u>OXY USA WTP Limited Partnership</u> Well No. <u>8 – Shelby 12 Federal</u> Location: <u>SH: 1381' FSL & 1235' FWL BH: 660' FSL & 660' FWL</u> sec. <u>12</u>, T. <u>22 S.</u>, R. <u>24 E.</u> Lease: <u>NM-12828</u>

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#### **III. PRESSURE CONTROL:**

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3. After setting the <u>9-5/8</u> inch intermediate casing string and before drilling into the <u>Wolfcamp</u> formation, the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The Carlsbad Field Office shall be notified at (505) 361-2822 in sufficient time for a representative to witness the tests.

B. The tests shall be done by an independent service company.

C. The results of the test will be reported to the BLM Carlsbad Field Office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.

D. 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.

E. Testing must be done in a safe workman like manner. Hard line connections shall be required.

#### **IV. DRILLING MUD:**

1. 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:

A. Recording pit level indicator to indicate volume gains and losses.

B. Flow-sensor on the flow-line to warn of abnormal mud returns from the well.