

DRILL

Roswell NM, 88202-2014

14 Distance in miles and direction from nearest town or post office\*

Elevations (Show whether DF, KDB, RT, GL, etc.)

3 A Surface Use Plan (if the location is on National Forest System Lands, the

SUPO shall be filed with the appropriate Forest Service Office)

Type of work

Type of Well

At surface

3a

Name of Operator

Address PO Box 2014

At proposed prod zone

location to nearest property or lease line, ft

4339

25

Title

Approximatly 25 miles Distance from proposed'

18 Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft

(Also to nearest drig unit line, if any)

1. Well plat certified by a registered surveyor

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

Single Zone

Phone No. (include area code)

505-623-4735

16 No of acres in lease

19 Proposed Depth

24. Attachments

Approximate date work will start\*

Name (Printed Typed) James Schultz

 $05/0\,\mathrm{k}/2005$ 

1800.00

45001

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

REENTER

## DEC 19 2008 OCD-ARTESIA

Form 3160-3 (April 2004) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER

Oil Well 🗸 Gas Well

McKay Oil Corporation

Location of Well (Report location clearly and in accordance with any State requirements \*) 1650' FNL & 400' FEL

		FORM A OMB No Expires M	1004-013	7
		5 Lease Serial No NM 36189		
ENTER	Ţ	6. If Indian, Allotee	or Tnbe	Name
<del></del>		7 If Unit or CA Agree	ement, N	ame and No
	. ~	8 Lease Name and V		
one Multi	ple Zone	McKay B Fede	ral 4	
		9 API Well No <b>30 · 00</b>	5.1	04082
ide area code)		10 Field and Pool, or E	Explorator	у
35		W. Pecos ABO	Slope	-
		11 Sec, T R M or BI	k and Su	rvey or Area
		Lot H, Sec. 33,	T5S, R	21E
		12 County or Parish		13 State
		Chaves		NM
lease	17 Spacing	g Unit dedicated to this w	vell	
	160'			
<u> </u>	20 BLM/E	BIA Bond No on file		·
	On Fi	le		
late work will sta	 urt*	23 Estimated duration	1	
/0 L/2005		7 - 10 days		
nts RC	SWELL CO	ONTROLLED WATER	BASIN	
No 1, shall be	attached to the	is form		
Bond to cover ( Item 20 above)	the operation	ns unless covered by an	existing	bond on file (see
Operator certifi Such other site authorized offi	specific info	ormation and/or plans as	may be r	equired by the
ed Typed)			Date	

Name (Printed Typod) Angel Mayes /S/ Angel Mayes 1 6 DEC 2009. Assistant Field Manager, ROSWELL FIELD OFFICE **APPROVED FOR 2 YEARS** ands And Minerals Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon Conditions of approval, if any, are attached

Title 18 USC Section 1001 and Title 43 USC Section 1212, make it a crime for any person knowingly 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 page 2)

Approved by (Signature)

DECLARED WATER BASIN

Casing must be CIRC

WITNESS

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

#### State of New Mexico

DISTRICT I 1525 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

Form C-102

Fee Lease - 3 Copies

Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT ☐ AMENDED REPORT 1220 S. ST. FRANCIS DR., SANTA FE, NM 87605 Pool Code API Number 31*·005*· Well Number Property Name Property Code 35182 McKAY B FEDERAL OGRID No. Operator Name Elevation McKAY OIL CORPORATION 4339

#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	į
H	33	5-S	21-E		1650	NORTH	400	EAST	CHAVES	

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or	nfill (	Consolidation (	Code Or	der No.				
160									

## NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A NON-STANDARD UNIT HAS BEED	N APPROVED BY TH	E DIVISION
GEODETIC COORDINATES NAD 27 NME  Y=1031141.6 N X=377328.8 E  LAT.=33'50'01.86" N LONG =104'44'14.27" W  DETAIL  4324.3' 4335.7'	400' SEE DETAIL	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief  Signature James Schultz Printed Name Agent Title  05/04/05 Date  SURVEYOR CERTIFICATION  I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervisors and that the same is true and correct to the best of my belief  APRIL 11, 2005  Date Surveyed  APRIL 11, 2005  Certificate No. CARY EDSON  12641

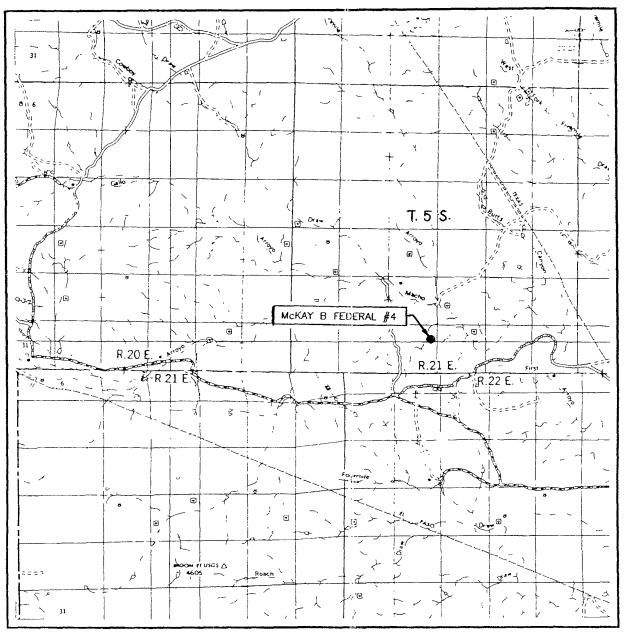
## PERTINENT INFORMATION

#### FOR MCKAY OIL CORPORATION MCKAY B FEDERAL 4 1650' FNL & 400 FEL SEC 33, T5S, R21E

#### Chaves County, New Mexico

LOCATED:	25 air miles Northwest of Roswell, NM.
LEASE NUMBER:	NM 36189
LEASE ISSUED:	05/01/1981
RECORD LESSEE:	McKay Petroleum Corporation
BOND COVERAGE:	Operator's \$25,000 Statewide
AUTHORITY TO OPERATE:	Assignment of Operating Rights
ACRES IN LEASE:	1800.00
SURFACE OWNERSHIP:	Federal
OWNER:	USA-BLM
POOL RULES:	General Statewide Rules
EXHIBITS:	<ul><li>A. Road and Well Map</li><li>B. Contour Map</li><li>C. Rig Layout</li><li>D. BOP Diagram</li><li>E. Lease Map</li></ul>

# VICINITY MAP



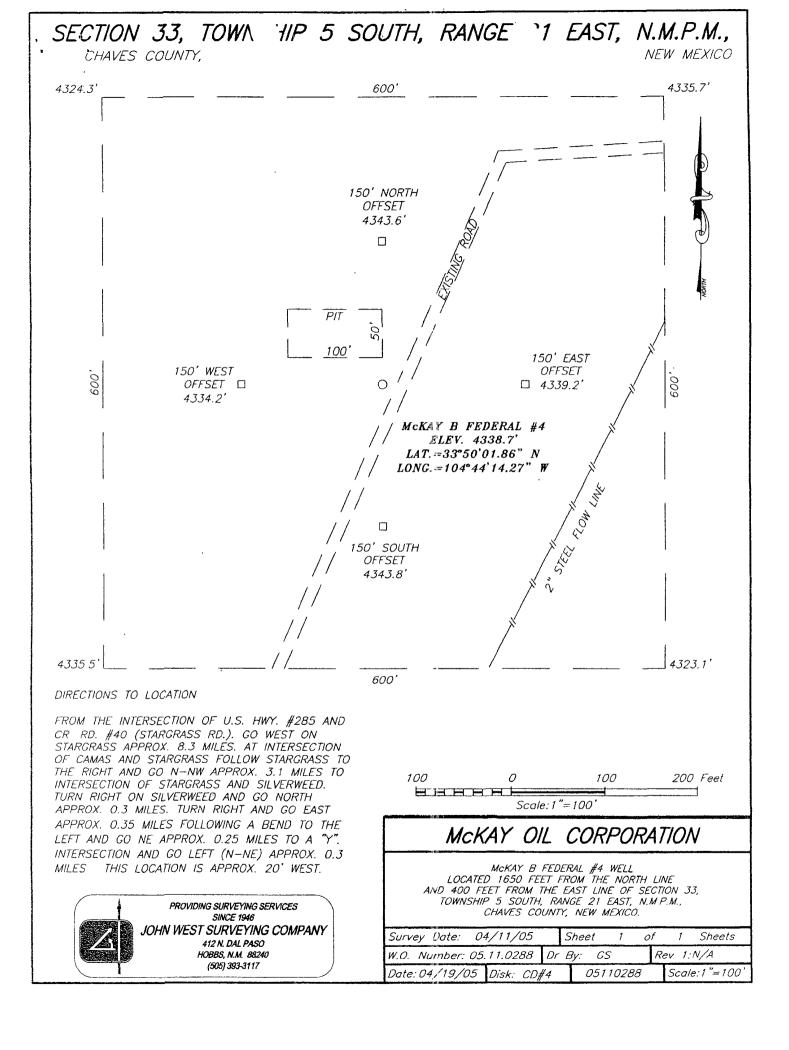
SCALE: 1" = 2 MILES

SEC33_ 1	WP. 5-5 RGE. 21-E
SURVEY	N.M.P.M.
COUNTY	CHAVES
DESCRIPTION	1650' FNL & 400' FEL
ELEVATION	4339'
OPERATOR	McKAY OIL CORPORATION
IFASE	McKAY B FEDERAL

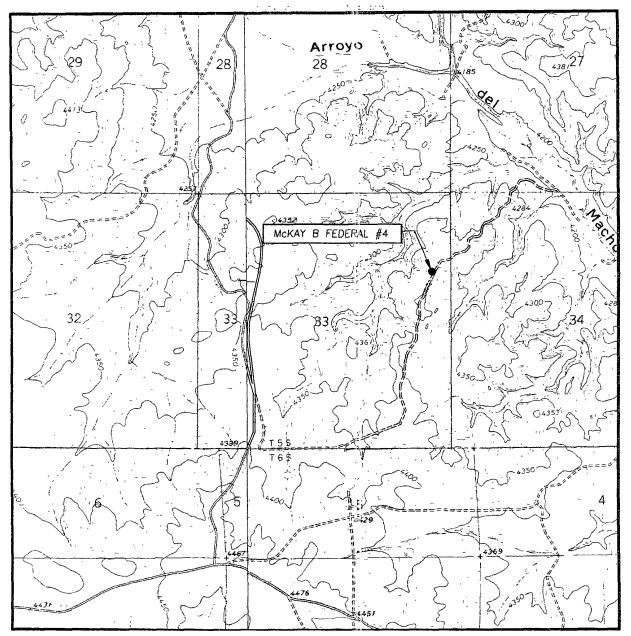


PROVIDING SURVEYING SERVICES SINCE 1946 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240 (505) 393-3117





# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. 33 TWP. 5-S RGE. 21-E

SURVEY N.M.P.M.

COUNTY CHAVES

DESCRIPTION 1650' FNL & 400' FEL

ELEVATION 4339'

McKAY OIL

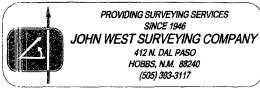
OPERATOR CORPORATION

LEASE MCKAY B FEDERAL

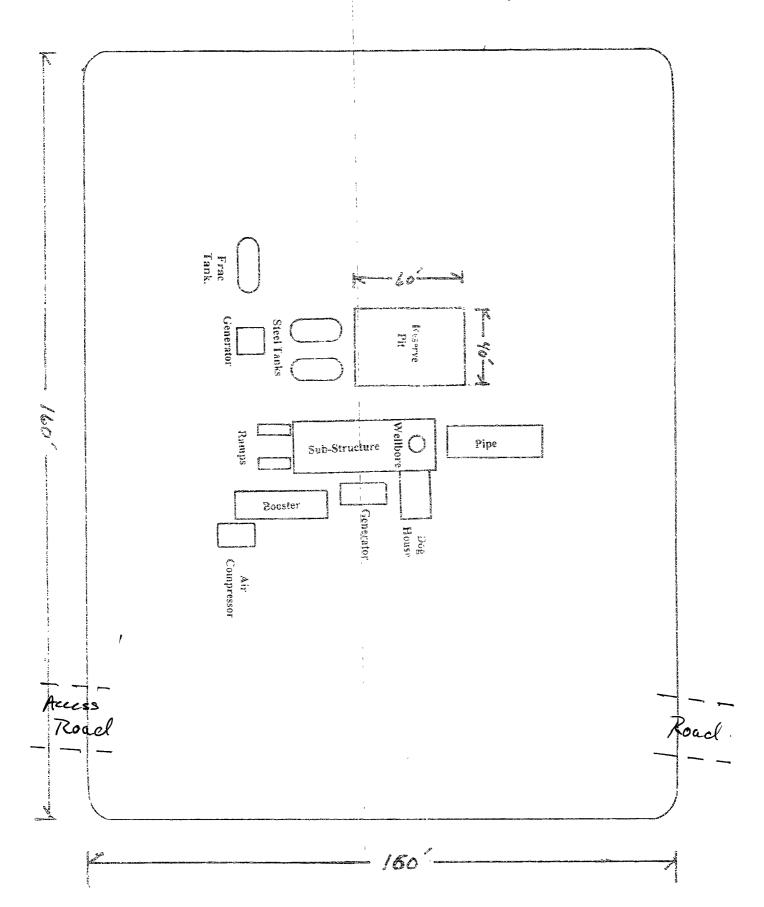
U.S.G S. TOPOGRAPHIC MAP

MESA SW, N.M. AND ROUND MOUNTAIN SE

CONTOUR INTERVAL: MESA SW, N.M. - 10' ROUND MOUNTIAN SE, N.M. - 10'





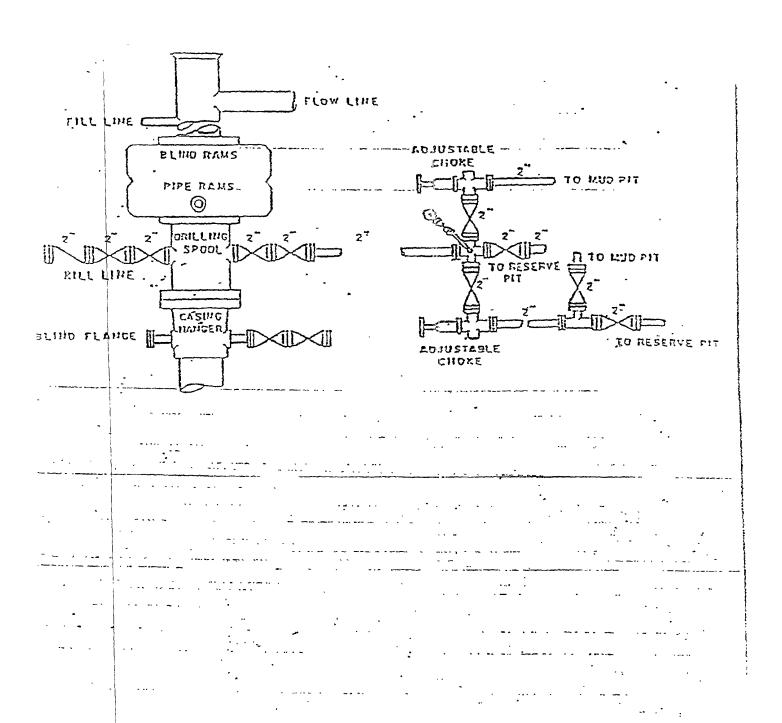


# McKay Oil Corporation

McKay B Federal 4

Section 33, T5S, R21E Chaves County, New Mexico

Exhibit "D"



5† ± ±	1 361B5	McKay B	Federal 4		McKay Chi	inexco
- ; 6	5	Section 33, Chaves County	158, R21E , New Mexico	2	1	6
	<i>u</i> .\$.	Exhib	it "E"	\$10L6	_ u \$	) 
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#### SUPPLEMENTAL DRILLING DATA

#### MCKAY OIL CORPORATION MCKAY B DEFERAL #4 1650' FNL & 400' FEL Sec 33, T5S, R21E

#### Chaves County, New Mexico

The following items supplement Form 3160-3 in accordance with instruction contained in Onshore Oil and Gas Order No. 1:

- 1. SURFACE FORMATION: San Andres
- 2. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Yeso - 1077' Tubb - 2573' Abo - 2801'

#### 3. ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATIONS:

Fresh Water - In surface formation above 600' Gas - In Abo Formation below 2801'

#### 4. PROPOSED CASING PROGRAM:

12-1/4" hole 8-5/8" J-55 24# 950' + 7-7/8" hole 5-1/2" J-55 15.5# TD

#### 5. PROPOSED CEMENTING PROGRAM:

Surface to 950'class "C" - 350 sxs cemented and circulated to surface. Production Casing class "C" - 300 sxs cemented with adequate cover.

#### 6. PROPOSED DRILLING PROGRAM:

McKay Oil Corporation proposes to drill and test the ABO formation. Approximately 950' of surface casing will be set and cemented to surface. 5-1/2" production casing will be set and cemented with adequate cover, perforated and stimulated as needed for production.

- 7. PRESSURE CONTROL EQUIPMENT: Blowout preventer will consist of 2 ram, 2M system. A sketch of the BOP is attached.
- 8. CIRCULATION MEDIUM: Fresh water and mud

9. <u>AUXILIARY EQUIPMENT</u>: Full-opening drill string safety valve fit for the drill string in use, will be kept on the rig floor at all times.

#### 10. TESTING, LOGGING AND CORING PROGRAM:

Samples:

Catch samples from surface to TD.

DST's:

None.

Logging:

GR-CNL, Dual Lateral MSFL from

surface to TD.

Coring: None.

# 11. <u>ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE</u>: None anticipated.

12. <u>ANTICIPATED STARTING DATE</u>: As soon as possible. Drilling should be completed within 10 days. Completion operations (perforations and stimulation) will follow drilling operations.

#### MULTI-POINT SURFACE USE AND OPERATIONS PLAN

#### MCKAY OIL CORPORATION MCKAY B DEFERAL #4 1650' FNL & 400' FEL Sec 33, T5S, R21E

#### Chaves County, New Mexico

#### NM 36189

This plan is submitted with the application for permit to drill the above described well. The purpose of the plan is to describe 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 can be made of the environmental effects associated with the operation.

#### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well is staked. The well is approximately 21 miles north of Roswell, NM.
- B. <u>Directions</u>: From the intersection of U.S. Highway #285 and county road #40 (Stargrass Rd.) go west on CR Rd #40 (Stargrass) approximately 8.3 miles. At intersection of Camas and Stargrass turn right (onto Stargrass) and go approximately 3.1 miles N-NW to intersection of Stargrass and Silverweed. Turn right on Silverweed and go north approximately 0.3 miles. Turn right and go east approximately 0.35 miles, follow bend to the left, and go NE approximately 0.25 miles to "Y". Turn left and go N-NE approximately 0.3 miles. This location is approximately 20' west.

#### 2. PLANNED ACCESS ROAD:

A. Length and Width: No additional road is needed.

B. Surface Materials: Not applicable

C. Turnouts: None

D. Maximum Grade: Not applicable

E. Drain Design: Not applicable

F. Culverts: None.

- G. Cuts and Fill: None.
- H. Gates, Cattle guards: None needed. Already in place.
- I. Top Soil: Very little.

#### 3. LOCATION OF EXISTING WELLS:

A. A map indicating the location of adjacent wells is attached.

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A: <u>See Exhibit "A"</u> for location of existing lease wells. If the well is commercial, production facilities and tank battery will be constructed.
- B. Cuts and Fills: Less than 30' of cut and fill will be required for the pad size of  $250' \times 250'$ . (See Exhibit "D")
- C. <u>Top Soil</u>: Any top soil which can sustain plant vegetation will be bladed and piled in south east corner for future rehabilitation.

#### 5. LOCATION AND TYPE OF WATER SUPPLY:

A. Water will be purchased from a commercial source and trucked to the location over existing and proposed access roads.

#### 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Closest Pit to the location.

#### 7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during test will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

E. Trash, waste paper, garbage, and junk will be placed in portable receptacles

and hauled from the location upon completion of drilling and completion operations.

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

#### 8. ANCILLARY FACILITIES:

A. None necessary.

#### 9. WELL SITE LAYOUT:

- A. Exhibit "C" indicates the relation location and dimensions of the well pad, mud pits, reserve pit and major rig equipment.
- B. The location slopes very slightly to the east and southeast.
- C. The reserve pit will be lined with plastic to prevent loss of water.

#### 10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing conditions as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the well is non-productive or abandoned, the disturbed area will be rehabilitated using the preserved soil mentioned in 2.I. and 4.C.

#### 11. OTHER INFORMATION:

- A. <u>Topography</u>: The topography is a gradual slope to the south. Regional slope is northeast in the direction of the Arroyo del Macho.
- B. Soil: Sandy loam with limestone outcropping.
- C. Flora and Fauna: The flora consists of typical desert vegetation, such as yucca, cactus and various grasses. Fauna consists of desert wildlife such as

coyotes, rodents, snakes, dear and antelope.

- D. Ponds and Streams: There are no ponds and streams known of.
- E. Residences and other Structures: The Darr Angel residence is approximately 1 mile South of this location.
- F. Archaeological, Historical and Other Cultural Sites: The report has been supplied as to this location is a prior submission.
- G. Land Use: Grazing.
- H. Surface Ownership: USA-BLM.

#### 12. OPERATOR'S REPRESENTATIVE:

Jennifer Corn Roswell, New Mexico (505) 623-4735 (O) (505) 420-0802 (C)

#### 13. **CERTIFICATION:**

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 exists; that he statements made in this plan are, to the best of my knowledge true and correct; that the work associated with the operations proposed herein will be performed by MCKAY OIL CORPORATION and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to provisions of 18 USC 1001 for the filing of a false statement.

SIGNATURE

11-12-08

# MCKAY OIL CORPORATION MCKAY B FEDERAL 7

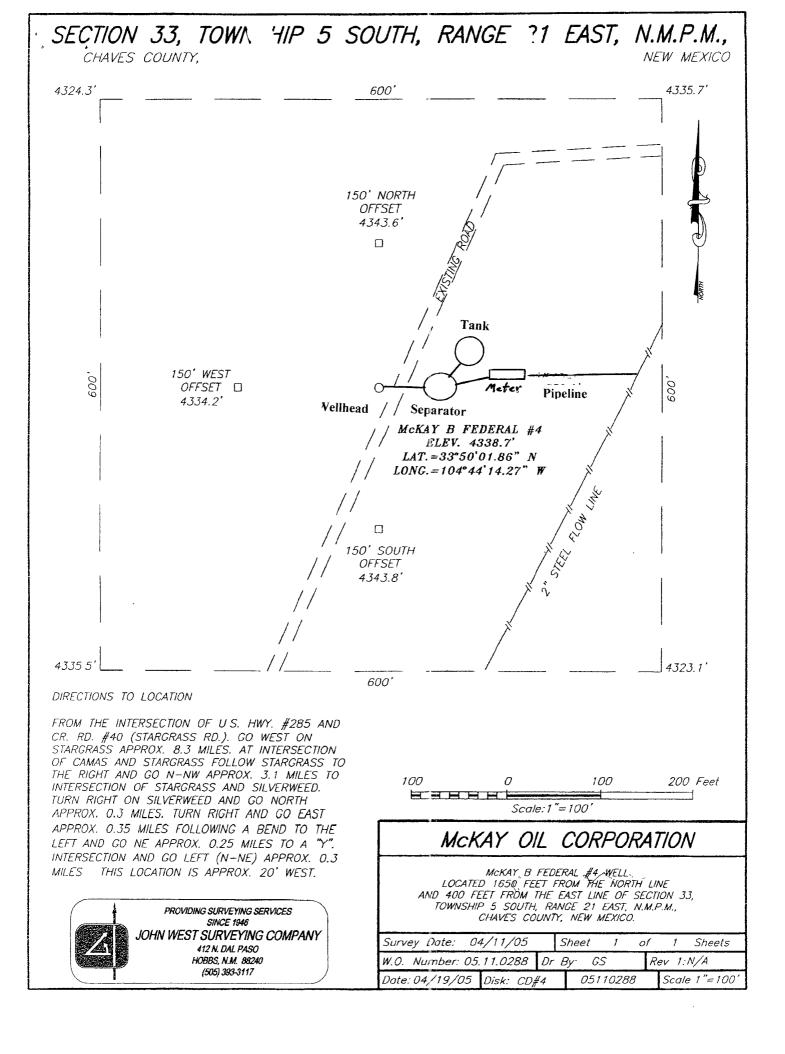
1650' FNL & 400' FEL Sec. 33, T5S, R21E

Chaves County, New Mexico

#### Other Specific Information and Plans

#### Proposed Pipeline

A 2" polyethylene surface pipeline (approximately 200' long) along the route as set forth on attached survey plat to an existing steel pipeline. The pipeline route starts at the northeast corner of the wellpad and travels due east. Where the pipeline cross the access road it will be buried approximately 2' and shielded with steel pipe. Pipeline is a low pressure (30 -50 psi) pipeline.



# **Southwest Petroleum Land Services, LLC**

100 N Pennsylvania Roswell, NM 88203 (505) 622-6713 (505) 622-9282 fax

November 12, 2008

Oil Conservation Division Bryan Arrant 1301 W. Grand Avenue Artesia, NM

Re: H2S Contingency Plan-McKay B Federal 4

Bryan,

Please see attached Contingency Plan-H2S for the McKay B Federal #4 located in Sec 33, T5S, R21E 1650' FNL & 400' FEL in Chaves County. Should you need any further information, please contact me at 505-626-6879

Sincerely,

Agent for McKay Oil Corporation

MCKAY OIL CORPORATION PO BOX 2014 ROSWELL, NM 88202-2014 505-623-4735

HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN FOR THE MCKAY B FEDERAL 4
LOCATED IN SEC 33, T5S, R21E IN CHAVES COUNTY, NEW MEXICO

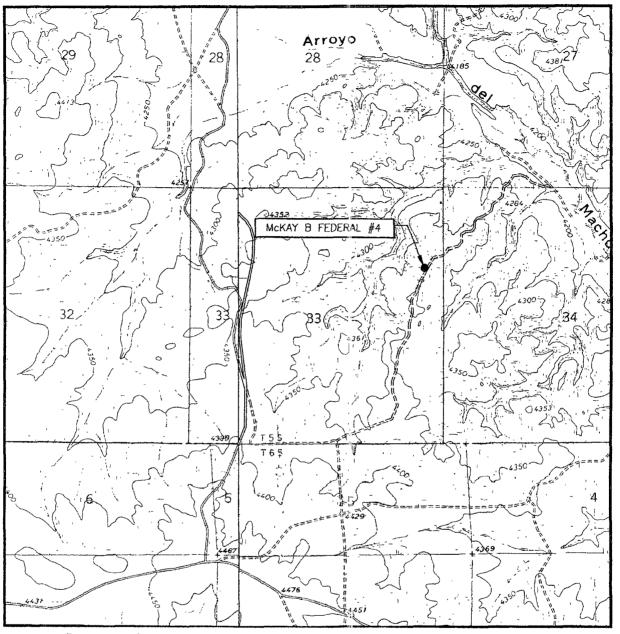
NO HYDROGEN SULFIDE OR OTHER HAZARDOUS GASES OR FLUIDS HAVE BEEN ENCOUNTERED, REPORTED OR KNOWN TO EXIST AT THIS DEPTH IN THIS AREA.

#### MCKAY B FEDERAL #4

This is an open drilling Site. H2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H2S, including warning signs, wind indicators and H2S monitor. Pumpers carry (MICROPACKS) H2S pocket testers at all times. Pulling units have an H2S indicator that puts off light and alarm on any indication of H2S being present.

MAPS - SEE ATTACHED

## LOCATION VERIFICATION MAP



SCALE. 1" = 2000'

SEC. 33 TWP. 5-S RGE. 21-E

SURVEY\_\_\_\_\_N.M.P.M.

COUNTY\_\_\_\_CHAVES

DESCRIPTION 1650' FNL & 400' FEL

DESCRIPTION TOSO THE & TOO TEL

ELEVATION 4339'

McKAY OIL CORPORATION

LEASE MCKAY B FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

MESA SW, N.M. AND ROUND MOUNTAIN SE

CONTOUR INTERVAL:
MESA SW, N.M. - 10'
ROUND MOUNTIAN SE. N.M. - 10'



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

#### EMERGENCY PROCEDURES

In the case of a release of gas containing H2S, the first responder must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder must evacuate any public spaces encompassed by the 100 ppm ROE. First responder 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.

All responders must have training in the detection of H2S measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H2S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries occur during the response.

#### IGNITION OF GAS SOURCE

Should control of the well be considered lost and ignition considered, take care to protect against exposure of sulfur Dioxide (SO2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

#### **CHARACTERISTICS OF H2S & SO2**

COMMON	CHEMICAL	SPECIFIC	THRESHOLD	HAZARDOUS	LETHAL
NAME	FORMULA	GRAVITY	LIMIT	LIMIT	CONCENTRATION
HYDROGEN SULFIDE	H2S	1.189 AIR=1	10 PPM4	100 PPM/HR	600 PPM
SULFUR DIOXIDE	SO2	2.21 AIR=1	2 PPM	N/A	1000 PPM

#### **CONTACTING AUTHORITIES**

McKay Oil Corporation 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 must be in coordination with the State of New Mexico's Hazardous Materials Emergency Response Plan (HMER).

#### MCKAY OIL CORPORATION CALL LIST

CHAVES COUNTY (505) OFFICE CELL PHONE HOME PHONE
JIM ROBINSON 625-1154 626-8579 624-1093
ROY MCKAY 623-4735 626-8571 623-4735

CHAVES COUNTY (505)

**ROSWELL** 

STATE POLICE 622-7200

CITY POLICE 911 or 624-6770

SHERIFF'S OFFICE 624-6500 AMBULANCE 911

FIRE DEPARTMENT 624-6800

LEPC (Local Emergency Planning Committee) Teresa Barncastle 624-6770

ext 129

NMOCD 748-1283 ENMMC (Hospital) 622-8170

## **EXHIBIT A**

# PECOS DISTRICT - RFO CONDITIONS OF APPROVAL

December, 2008

OPERATORS NAME: McKay Oil Corporation

LEASE NO.: NM-36189

WELL NAME & NO: McKay "B" Federal #4

SURFACE HOLE FOOTAGE: 1650' FNL & 400' FEL LOCATION: Section 33, T. 5 S., R. 21 E., NMPM

COUNTY: Chaves County, New Mexico

#### **GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

#### I. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD (Filing of a Sundry Notice is required for this 60 day extension).

#### II. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator 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 shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

#### III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

#### IV. CONSTRUCTION

#### A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

#### **B. TOPSOIL:**

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

#### C. RESERVE PITS:

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 60' X 40' on the NORTHWEST side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

#### D. FEDERAL MINERAL MATERIALS PIT:

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Roswell Field Office at (505) 627-0236.

#### E. WELL PAD SURFACING:

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational need.

#### F. ON LEASE ACCESS ROADS:

#### **Road Egress and Ingress**

- A. The access road shall be constructed to access the southeast corner of the well pad.
- B. The existing access road shall be constructed on the **southeast** side of the well pad (SEE EXHIBIT C Location Map) and shall provide continually ingress and egress for other users when they travel in the area. The approval of the reroute is allowed under the condition that upon completion of the well or if the well is drilled a dry hole, the holder shall reconstruct and realign the access road to its original route. If the well is a producer, the holder's production facilities shall not obstruct the original access road alignment. The holder shall reclaim the temporary access road to its natural topography and establish vegetation on the reclaimed area(s).

#### Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

#### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

#### Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

#### Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

# 

#### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

# 1' Minimum Depth Berm on Down Slope Side

Cross Section Of Typical Lead-off Ditch

All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

#### Formula For Spacing Interval Of Lead-off Ditches.

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: 
$$\frac{400'}{4\%} + 100' = 200'$$
 lead-off ditch interval

#### Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

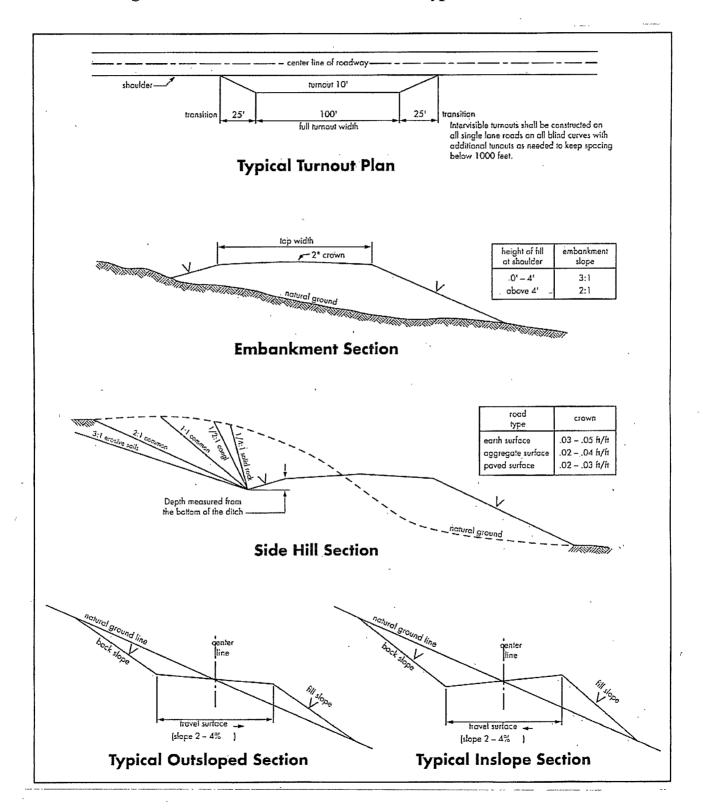
Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

#### **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 - Cross Sections and Plans For Typical Road Sections



#### V. DRILLING

#### A. DRILLING OPERATIONS REQUIREMENTS

- 1. Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0205 or after office hours call (575) 910-6024. Engineer on call during office hours call (575) 627-0275 or after office hours call (575) 626-5749.
- 2. The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:
  - a. Spudding well
  - b. Setting and/or Cementing of all casing strings

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

**BOPE** Tests

- 3. 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.
- 4. Include the API Number assigned to well by NMOCD on the subsequent report of setting the first casing string.
- 5. The operator will accurately measure the drilling rate in ft/min to set the base of the usable water protection casing string(s) opposite competent rock. The record of the drilling rate along with the caliper-gamma ray-neutron well log run to surface will be submitted to this office as well as all other logs run on the borehole 30 days from completion
- 6. Air, air-mist or fresh water and non toxic drilling mud shall be used to drill to the base of the usable water protection casing string(s). Any polymers used will be water based and non-toxic.

#### B. CASING

1. The <u>8-5/8</u> inch usable water protection casing string(s) shall be set at approximately 775 to 800 feet opposite competent bedrock.

If not the operator is required to set usable water protecting casing in the next thick competent bedding (i.e. 15 to 25 ft or greater) encountered and cemented to the surface.

- a. If cement does not circulate to the surface, the Roswell Field Office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin or 500 pounds compression strength, whichever is greater. (This is to include the lead cement).

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
- d. If cement falls back, remedial action will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>sufficient to tie</u> <u>back 500 feet above the uppermost perforation in the pay zone</u>. If cement does not circulate, a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
- 3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 4. All casing shall be new or reconditioned and tested casing and meet API standards for new casing. The use of reconditioned and tested casing shall be subject to approval by the authorized officer. Approval will be contingent upon the wall thickness of any casing being verified to be at least 87-1/2 per cent of the nominal wall thickness of new casing.

#### C. PRESSURE CONTROL

- 1. Before drilling below the <u>8-5/8</u> inch surface casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.
- 2. Before drilling below the <u>8-5/8</u> inch surface casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi.
- 3. The BOPE shall be installed before drilling below the <u>8-5/8</u> inch surface casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- a. The BLM Roswell Field office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
- b. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart will be submitted to the BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.
- c. 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.
- d. Testing must be done in a safe workman like manner. Hard line connections shall be required.
- e. A variance to test the BOPE to the reduced pressure of  $\underline{1000}$  psi using the rig pumps prior to drilling below the  $\underline{8-5/8}$  inch surface casing is approved

#### VI. PRODUCTION

#### A. WELL STRUCTURES & FACILITIES

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim re-contouring and re-vegetation of the well location.

#### **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, <u>Juniper Green</u>, from the Environmental Color Standard Chart.

#### VII. INTERIM RECLAMATION & RESERVE PIT CLOSURE

#### A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site within 6 months of well completion in accordance with Onshore Order Number 1, XII. B. Reclamation. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses.

During reclamation, the removal of caliche is important to increasing the success of re-vegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, in order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

#### **B. RESERVE PIT CLOSURE**

At the time reserve pits are to be reclaimed, operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

ECTOR VERY COBBLY LOAM, 3-15% SLOPE (Very Shallow, CP-4 Ecological Site)
AND

ECTOR VERY COBBLY LOAM, DRY, 3-15% SLOPE (Shallow SD-3 Ecological Site)

Common Name	•	Pounds of Pure
and Preferred Variety	Scientific Name	Live Seed Per Acre
Black grama, var. Nogal	(Bouteloua eriopoda)	2.00 Lbs.
Blue grama, var. Lovington	(Bouteloua gracilis)	1.00 Lb.
Sideoats grama,	(Bouteloua curtipendula)	2.00 Lbs.
var. Vaughn or El Reno		,
New Mexico Feathergrass	(Stipa neomexicana)	1.00 Lb.
Desert or Scarlet	(Sphaeralcea ambigua)	1.00 Lb.
Globemallow	or (S. coccinea)	
Buckwheat	(Eriogonum spp.)	<u>1.00 Lb.</u>
TOTAL POUNDS PURE L	IVE SEED PER ACRE	8.00 Lbs.

If one species is not available, increase ALL others proportionately. The seed mixture shall be certified weed free seed. A minimum of 4 species is required, including 1 forb species.

#### VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

#### **EXHIBIT B**

December, 2008

ROSWELL FIELD OFFICE
BLM Serial Number: NM-36189
Company Name: McKay Oil Corporation
Well Name and Number: McKay "B" Federal #4

# STANDARD STIPULAȚIONS FOR SURFACE INSTALLED PIPELINES IN THE ROSWELL FIELD OFFICE, BLM

## A. THE APD AND/OR THE SUNDRY NOTICE WAS USED FOR THE ON-LEASE SURFACE PIPELINE CONSTRUCTION.

- 1. The APD and/or Sundry Notice and Report On Wells can act, to the extent possible, as an application for the on-lease construction of the surface pipeline on Federal surface lands. In combination with the approved APD, the following standard terms and conditions are hereby attached to the APD/SN on-lease authorization.
- 2. The operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer, BLM.
- 3. The BLM shall administer compliance and monitor construction of the pipeline. Notify **Richard G. Hill** at least 3 working days (72 Hours) prior to commencing construction of the pipeline. Roswell Field Office phone number (505) 627-0247.

#### **B. PIPELINE CONSTRUCTION:**

- 1. The entire 200 feet of polyethylene pipeline shall be laid on the surface within a maximum disturbance width of 10 feet.
- 2. The 2 inch polyethylene pipeline tie-point shall be in the NW¼SE¼NE¼ in Section 33, T. 5 S., R. 21 E. NMPM and shall be connected to the existing 2 inch surface pipeline issued under R/W # NM-69398.
- 3. The operations shall be contained within the perimeters of the archaeological surveyed areas (600 Feet by 600 Feet).
- 4. The pipeline shall be buried under all roads. The operator shall bury the pipeline 48 inches deep and 30 feet across all road crossings.
- a. Most lease roads have a **30 foot** maximum disturbance width; the operator shall start and end construction of burying the pipeline under all existing roads on the outer limits of the maximum disturbance width. The operator shall consult with the Authorized Officer if the depth cannot be accomplished due to rock outcropping, or if the soils are not deep enough.

- 5. All construction and maintenance activity shall be confined within the authorized pipeline corridor width of 10 feet for surface installed pipeline.
- 6. No blading or clearing of any vegetation is allowed unless approved in writing by the Authorized Officer.
- 7. The operator shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain.
- 8. The operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under the Sundry Notice approval for construction of a surface pipeline.
- 9. The operator shall comply with all applicable Federal regulations and laws. The operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 *et seq.* (1982) with regards to any toxic substances that are used or generated on the pipeline corridor or on facilities authorized under this approval (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 of 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.
- 10. The operator 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 pipeline corridor (unless the release or threatened release is wholly unrelated to the operator's activity on the pipeline corridor), or resulting from other activities of the operator on the pipeline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.
- 11. The operator shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipeline rupture, fire, or spills caused or substantially aggravated by any of the following within the pipeline corridor or permit area:
- a. Activities of the operator including, but not limited to construction, operation, maintenance and termination of the facility.

- b. Activities of other parties including, but not limited to:
  - (l) Land clearing.
  - (2) Earth-disturbing and earth-moving work.
  - (3) Blasting.
  - (4) Vandalism and sabotage.
- 12. The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.
- 13. This section shall not impose strict liability for damage or injury resulting primarily from an act of god, an act of war or from the negligent acts or omissions of the United States.
- 14. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any gas, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal land, the control and total removal, disposal, and cleaning up of such gas, salt water, or other pollutant, wherever found, shall be the responsibility of the operator, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal land, or to repair all damages resulting therefrom, on the Federal land, the Authorized Officer may take such measures as deemed necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the operator. Such action by the Authorized Officer shall not relieve the operator of any responsibility as provided herein.
- 15. The operator shall minimize disturbance to existing fences and other improvements on public land. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The operator will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 16. In those areas where erosion control structures are required to stabilize soil conditions, the operator shall install such structures that are suitable for erosion control that are in accordance with sound resource management practices.
- 17. Excluding the pipe, all above-ground structures not subject to safety requirements shall be painted by the operator to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors "Juniper Green, designated by the Rocky Mountain Five State Interagency Committee.
- 18. The pipeline corridor shall have signs identifying the point of origin and completion of the pipeline and at all road crossings. At a minimum, the signs shall be legible; the signs shall state the operator's name, the BLM leaser number, and the product being transported. The signs shall be maintained in a good quality condition for the life of the pipeline.

19. The operator shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the operator. The operator shall take whatever steps are necessary to ensure that the pipeline corridor is not ever used as a roadway.

#### 20. SEEDING REQUIREMENTS:

- A. Should the operator create earth moving disturbance on the pipeline corridor and the Authorized Officer determines that the pipeline corridor requires seeding; the reclaimed area(s) shall be seeded with the seed mixture that was determined by the Roswell Field Office for the Desired Plant Community on the pipeline corridor.
- B. The planting of the seed shall be done in accordance with the following seeding requirements:
  - 1. The soil shall be plowed under with soil turning equipment and the plowed surface shall be disked before seeding. Seed shall be planted using a drill equipped planter with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area. Smaller/heavier seed has a tendency to drop to the bottom of the drill and is planted first; the holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled.
  - 2. The operator shall seed all the disturbed areas with the DPC seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed per acre, (Pounds of pure live seed per acre: pounds of seed X percent purity X percent germination = pounds pure live seed). There shall be no primary or secondary noxious weeds in the seed mixture.

In accordance with State law(s) the seed should be tested for purity and viability within nine (9) months prior to sell. Commercial seed shall be either certified or registered seed. The seed mixture container shall be tagged in accordance with State law(s) and the certified seed tag shall be made available for inspection by the Authorized Officer.

3. Desired Plant Community seed mixture to be planted in pounds of pure live seed per acre:

ECTOR VERY COBBLY LOAM, 3-15% SLOPE (Very Shallow, CP-4 Ecological Site)
AND

ECTOR VERY COBBLY LOAM, DRY, 3-15% SLOPE (Shallow SD-3 Ecological Site)

Common Name		Pounds of Pure
and Preferred Variety	Scientific Name	Live Seed Per Acre
Black grama, var. Nogal	(Bouteloua eriopoda)	2.00 Lbs.
Blue grama, var. Lovington	(Bouteloua gracilis)	1.00 Lb.
Sideoats grama,	(Bouteloua curtipendula)	2.00 Lbs.
var. Vaughn or El Reno		
New Mexico Feathergrass	(Stipa neomexicana)	1.00 Lb.
Desert or Scarlet	(Sphaeralcea ambigua)	1.00 Lb.
Globemallow	or (S. coccinea)	
Buckwheat	(Eriogonum spp.)	<u>1.00 Lb.</u>
TOTAL POUNDS PURE	LIVE SEED PER ACRE	8.00 Lbs.

If one species is not available, increase ALL others proportionately. The seed mixture shall be certified weed free seed. A minimum of 4 species is required, including 1 forb species. No less than 8.00 pounds pls per acre shall be applied.

- 4. The seeding of the disturbed areas shall be repeated until a vegetation thicket is established on the pipeline corridor. The Authorized Officer shall make the determination when the revegetation growth on the disturbed areas is satisfactory.
- 5. The operator shall be responsible for the establishment of vegetation on the pipeline corridor. Evaluation of vegetation growth will not be made before the completion of the first growing season after seeding. The Authorized Officer reserves the right to require reseeding at a specific time if seed does not germinate after one growing season. Waiver of this requirement would be considered if diligent attempts to revegetate the disturbed areas have failed and the Authorized Officer determines that a further attempt to replant the pipeline corridor is futile.
- 6. Contact Mr. Richard Hill at (505) 627-0247 to witness the seeding operations, two (2) days prior to seeding the disturbed areas.

#### C. Invasive and Noxious Weeds Requirement:

- 1. The operator shall be held responsible if noxious weeds become established within the pipeline corridor or disturbed areas. Evaluation of the growth of noxious weeds shall be made upon discovery. Weed control will be required on the disturbed land where noxious weeds exist, that are associated pipeline corridor/routes, and adjacent land affected by the establishment of weeds due to this action. The operator is responsible for consultation with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policy.
- 2. The operator shall insure that the equipment and/or vehicles that will be used on the pipeline construction are not polluted with invasive and noxious weed seed. Transporting of invasive and noxious weed seed could occur if the equipment and vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds, the Authorized Officer requires that the equipment and vehicles used to construct the pipeline shall be cleaned with either high pressure water or air prior to construction of the surface pipeline.



# EXHIBIT C McKay "B" Federal #4 NM-36189 1650' FNL & 400' FEL Section 33, T. 5 S., R. 21 E. Chaves County. New Mexico



