Resubmit APD Previous Aproval: 5/28/04	exico Oli Compervation	Division	1, Pource	
Form 3160-3	1625 N. French I Hobbs, NM 86	Drive	FORM APPROV	ED
(August 1999).	TYOUNG' LAIM 999	290	OMB No. 1004-0 Expires November 30	136
DEPARTMENTS OF THE IN	TERIOR Re-Subm	Hat	5. Lease Serial No.	,
BUREAU OF LAND MAIN G	· .	,	NM-108976 6. If Indian, Allottee or Trib	e Name
APPLICATION FOR PERMIT TO OR	ILL OR REENTER 16	6	o. If Indian, Another of The	e ruine
la. Type of Work: DRILL PERSON	R-111-POTASI	H	7. If Unit or CA Agreement,	Name and No.
1b. Type of Well: Oil Well  Gas Well Other	Single Zone  Multi	ple Zone	8. Lease Name and Well No. Outlaw 22 Fed. Com., #	(34032)
2. Name of Operator			9. API Well No.	
Samson Resources	(20165)	>	30-025-	
	3b. Phone No. (include area code)		10. Field and Pool, or Explora	tory
Samson Plaza-Two W. 2nd St. Tulsa, OK 74103  4. Location of Well (Report location clearly and in accordance with an	(918) 591-1522		Teas Penn Gas	od Survey or Area
	iy State requirements. 1)		11. 500., 1., R., W., OI DIK. un	a bulvey of thou
At proposed producing	0			
At proposed prod. zone same  14. Distance in miles and direction from nearest town or post office*	R		Sec. 22-T20S-R33E 12. County or Parish	13. State
41 miles northeast of Carlsbad, NM			Lea	NM
15. Distance from proposed*	16. No. of Acres in lease	17. Spacin	g Unit dedicated to this well	
location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	400	320		
18. Distance from proposed location*	19. Proposed Depth		BIA Bond No. on file	
to nearest well, drilling, completed, applied for, on this lease, ft.	14,000'	NM-20	37	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will st	tart*	23. Estimated duration	
3593' GL	November 14, 2005  24. Attachments		6 weeks entireled Water Basin	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System I SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	ltem 20 above). 5. Operator certific	ation. specific info	s unless covered by an existin	
25. Signature	Name (Printed/Typed)		Date	
Deorack. Smith	George R. Smith		9/	26/05
Title				
Agent for Samson Resources	' N /# - Lawl/8" 41)		Data	
Approved by (Signature) inda S. C. Rundell	Name (19/4/Inda S.	C. Run	dell Date	C 1 2 2005
STATE DIRECTOR	Office NM	STATI	E OFFICE	
Application approval does not warrant or certify that the applicant holds loperations thereon.  Conditions of approval, if any, are attached.			lease which would entitle the appropriate the Appropriate that the Appro	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulent statements or representations as to	a crime for any person knowingly a pany matter within its jurisdiction.	nd willfully	to make to any department or a	gency of the United
*(Instructions on reverse)				<u></u>
Lease Responsibility Statement: Samson Resourc concerning operations conducted on the leased lan	es accepts all applicable terms d or portion thereof.	s, conditio	ons, stipulations, and restri	ictions
R-111-P Proces	3, 4		MA	
CEMENT BEHI		Geo	orge R. Smith, agent	
CASING MUST	BE CIRCULATE!	) .	Proval Subject	SP.A
CEMENT BEHIND THE	Mess	GE SPI	neral requiren Ecial stipulatio Tached	ENTS AM
CASING MUST BE CIRCULATED		and i	A NAMA APPEA	
WITNESS				

#### DISTRICT I P.O. Box 1980, Hobbs, MK 88241-1980

#### State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994
Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT II P.O. Drawer DD, Artesia, NM 88211-0719

# OIL CONSERVATION DIVISION

P.O. Box 2088

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

Santa Fe, New Mexico 87504-2088

Received

DISTRICT IV

P.O. BOX 2088, SANTA PE, N.M. 87504-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
	86040	Teas Penn Gas
Property Code		ERAL COM. "22"
OGRID No. 20165	-	tor Name Elevation 3593'

#### Surface Location

UL or lot No.	Section	Township	Range	lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	22	20-S	33-E		660	NORTH	1980	EAST	LEA

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot (dn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	nsolidation (	Code Or	der No.				
320			com						

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

	OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE	DIVISION
	3584.7' 3590.4' 1980' 3591.4' NM-108976 NM-89926	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature  George R. Smith  Printed Name  Agent  Title  April 27, 2004  Date  SURVEYOR CERTIFICATION
· · ·	GEODETIC COORDINATES  NAD 1927 NME  Y = 569557.4 N  X = 711003.1 E  LAT. = 32°33′50.24″N  LONG. = 103°38′54.41″W	I hereby certify that the well location shown on this plat was plotted from field nates of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.  April 05, 2004  Date Surveyed  April 05, 2004  Date Surveyed  Professional Surveyor  04.11.0397  Certificate No. GART RESON 12841

#### APPLICATION FOR DRILLING

#### SAMSON RESOURCES

Outlaw 22 Federal Com., Well No. 1 660' FNL & 1980' FEL, Sec. 22-T20S-R33E Lea County, New Mexico Lease No.: NM-108976 (Development Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Samson Resources submits the following items of pertinent information in accordance with BLM requirements:

- 1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
- 2. The estimated tops of geologic markers are as follows:

Rustler	1,350'	Penn Shale	12,150'
Yates	3,066'	Strawn	12,300'
Capitan	3,532'	Atoka	12,500'
Delaware	5,250'	Morrow	13,200'
1 <sup>st</sup> Bone Spring	9,400'	T.D.	14,000'
Wolfcamn	11.600'		

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 300'.

Oil: Possible in the Delaware below 5200'.

Gas: Possible in Atoka below 12,500' and the Morrow below 13, 200'.

4. Proposed Casing Program:

		8				
HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
18 1/2"	16"	75.0#	K-55			Circ 890 sx "C" cement
14 3/4"	11 3/4"	54.5#	K-55	LT&C	0' - 3,510'	Circ. 1330 sx. HLC Prem Plus
10 5/8"	8 5/8"	32.0#	HC-K-55	LT&C	0' - 5,215'	Circ. 900 sx. Interfill C & Prem
7 7/8"	5 1/2"	20.0#	P110	LT&C	0' - 14,000'	1050 sx Zoneseal & 250 sx super H
						TOC 5000'

# 5. Minimum Specifications for Pressure Control Equipment:

NU 21 3/4" 2M WP Hydril & test to 800 psi before drilling 14 3/4" hole.

NU 13 5/8" 10M WP Shaffer, double over single w/ 13 5/8" Hydril annular preventer before drilling the 10 5/8" & 7 7/8" holes. Perform 3M test before drilling 10 5/8" hole & 5M test before drill 7 7/8" hole. See Exhibit "E".

6.	<b>MUD PROGRAM:</b>	MUD W	EIGHT VIS.	W/L CONTROL
	0' - 1,375':	Fresh water mud: 8.4 - 9	.2 ppg 28 - 29	No W/L control
	1,375' - 3,510':	Fresh/native brine 10.0 - 10	.4 ppg 26 - 29	No W/L control
	3,510' - 5,215':	Fresh water + addit. 8.8 - 9	.6 ppg 26 - 29	No W/L control
	5,215' - 12,300':	Fresh water/Cut brine 8.4 - 9	.2 ppg 26 - 29	No W/L control
	12,300' - 14,000':	Cut Brine/xcd Polymer 9.4 - 11	.5 ppg 29 - 42	W/L control: <10cc

7. Auxiliary Equipment: Blowout Preventer, flow sensors and stabbing valve.



# SAMSON RESOURCES

Outlaw 22 Federal Com., Well No. 1 Page 2

8. Testing, Logging, and Coring Program:

Drill Stem Tests: None unless conditions warrant. Logging: 5,215' to T.D: CNL-DNL w/GR-Cal.

5,215' to Surface: CNL-GR

Coring: Rotary sidewall if dictated by logs.

- 9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 6160 psi and surface pressure of 3080 psi with a temperature of 200°.
- 10. H<sub>2</sub>S: None expected. The Mud Log Unit will be cautioned to use a gas trap to detect H<sub>2</sub>S and if any is detected the mud weight will be increased along with H<sub>2</sub>S inhibitors sufficient to control the gas.
- 11. Anticipated starting date: November 14, 2005
  Anticipated completion of drilling operations: Approximately 6 weeks.



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

#### SAMSON RESOURCES

Outlaw 22 Federal Com., Well No. 1 660' FNL & 1980' FEL, Sec. 22-T20S-R33E Lea County, New Mexico Lease No.: NM-108976

(Development Well)



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, to be followed in rehabilitating the surface environmental effects associated with the operations.

#### 1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a USGS/BLM Topo map showing the location of the proposed well as staked. The well site location is approximately 41 road miles northeast of Carlsbad, New Mexico. Traveling east from Carlsbad there will be approximately 37.0 miles of paved highway and 4 miles of gravel oilfield road.
- B. Directions: Travel east from Carlsbad, NM on U.S. Highway 62/180 for approximately 32 miles to NM Highway #176. Continue east on #62/180 for 5.3 miles, .1 mile east of MM #73. Turn south, at a Woodbine Pet. and a Shackleford Oil Co. sign, for .3 mile to an east/west crossroad and the Bandit 15 Fed. Com., #1 well site. Take the road around this well to the south for 1.4 miles to northeast corner of the Outlaw 22 Fed. Com., #1 well pad.

#### PLANNED ACCESS ROAD:

- A. Length and Width: The existing access road is approximately 7349 feet in length and 12 feet in width and is color coded red on Exhibit "A".
- B. Construction: The existing access road was constructed by grading and topping with compacted caliche and is properly drained.
- Turnouts: Five turnouts will be required, increasing the width to 20 feet for passing.
- D. Culverts: None required.
- E. Cuts and Fills: There will be cuts and fills to level sand dunes and basins.
- Gates, Cattle guards: One cattleguard will be required.
- G. Off Lease R/W: An off lease Right of Way No. NM-111825 was issued to cover this access road and pipeline Right of Way.

# **LOCATION OF EXISTING WELLS:**

A. Existing wells within a two-mile radius are shown on Exhibit "C".

# LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. Samson Resources has no production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas production-process equipment and tank battery, if required, will be installed on the drilling pad.

# SAMSON RESOURCES Outlaw 22 Federal Com., Well No. 1 Page 2

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

A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing access roads.

#### 6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche for the access road and well site pad will be obtained on location, if available, or from an approved Federal pit located in the SENW of Sec. 14-T20S-R33E. No surface materials will be disturbed except those necessary for actual grading and construction of the drill site and access road.

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

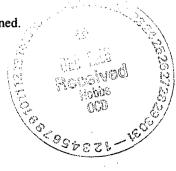
- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock and wildlife from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

#### 8. ANCILLARY FACILITIES:

A. None required.

#### 9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 500' X 500'.
- B. Mat Size: 400' X 250', plus 175' X 175' mud pits. The pits will be on the north.
- C. Cut & Fill: There will be a cut of 3 feet on the east with fill to the north and west
- D. The surface will be topped with compacted caliche and the mud pits will be plastic lined.



# SAMSON RESOURCES Outlaw 22 Federal Com., Well No. 1 Page 3

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

- A. After completion of drilling and/or completion operations, all equipment and other material not required 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 a condition as possible
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to work after completion or abandonment.

#### 11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road is located in the Querecho Plains. The location has an overall northwesterly slope of 1% from an elevation of 3597 feet.
- B. Soil: The topsoil on the well site and access road is reddish brown colored fine sand. The soil is of the Pyote Soils and Dune Land series.
- C. Flora and Fauna: The vegetation at the well site is a fair to sparse grass cover of three-awn, dropseed, bluestem, grama, muhly and other miscellaneous native grasses along with plants of mesquite, yucca, shinnery oak brush, sage, broomweed, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None.
- E. Residences and Other Structures: None, but existing oil field facilities.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and access road are on Federal surface.
- H. There is no evidence of archaeological, historical or cultural sites in the area. Archaeological Survey Consultants, P.O. Box 2285, Roswell, NM 88202 conducted an archaeological survey and their report was submitted to the appropriate government agencies on May 11, 2004.



# SAMSON RESOURCES Outlaw 22 Federal Com., Well No. 1 Page 4

#### 12. OPERATOR'S REPRESENTATIVE:

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

Don Eubank
Samson Resources
Samson Plaza-Two West Second St.
Tulsa, OK 74103-3103
Office Phone: (918) 591-1522
Cell Phone: (918) 633-8203

#### 13. CERTIFICATION:

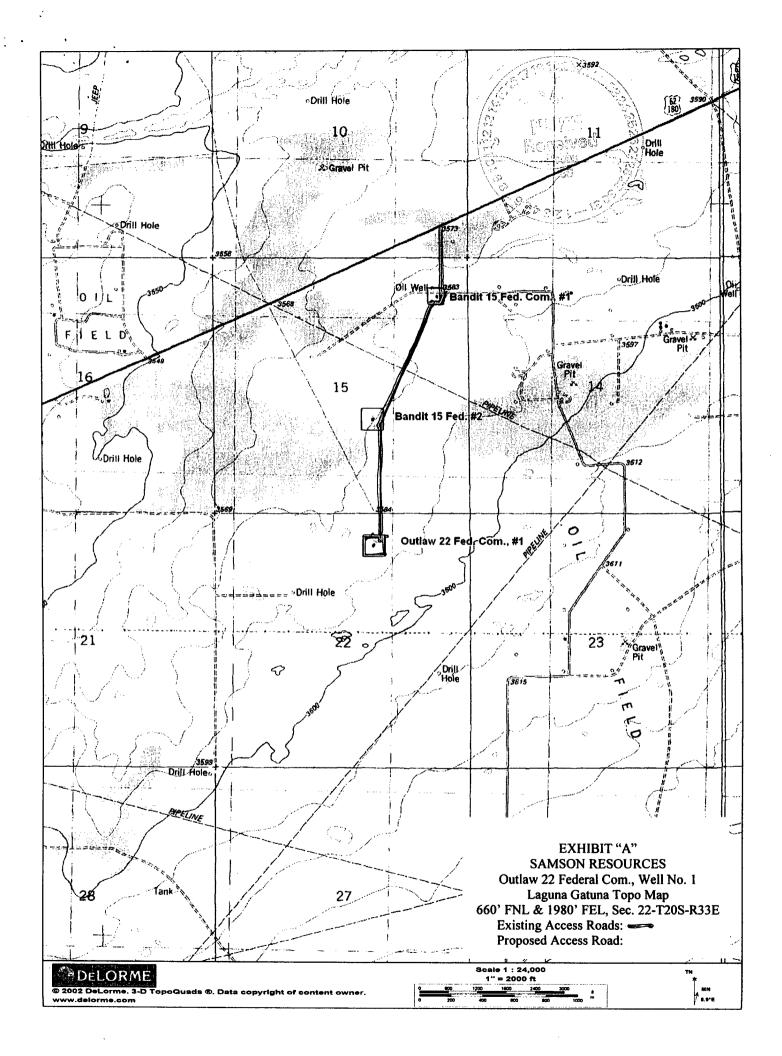
I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Samson Resources and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

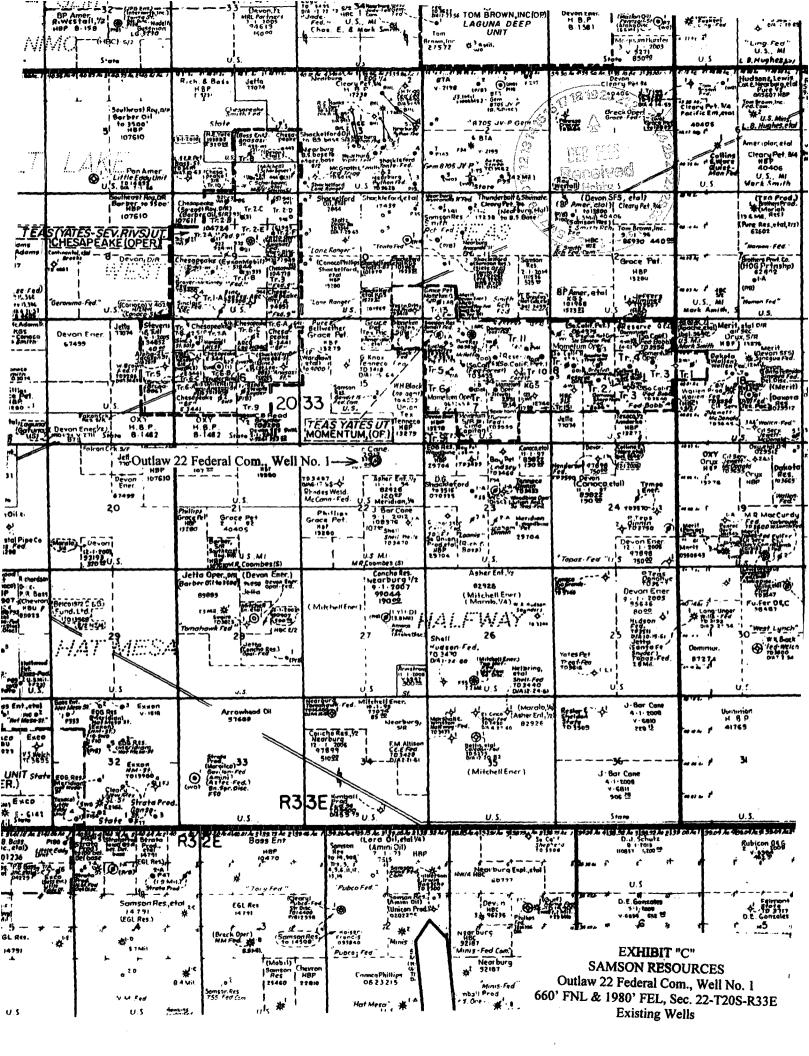
September 23, 2005

George R. Smith

Agent for: Samson Resources







# Patterson-UTI Drilling Company

Rig # 480

20,000'

# DRAWWORKS

Gardner& Denver 1100 E (1500HP) 1 3/8" drill line (2) GE 752 elec. molors

# **ENGINES**

3 - Caterpillars 3508, 900HP w/720KW generators

# DERRICK

Ideal 143", 1,000,000# hook load w/12 lines

# **SUBSTRUCTURE**

24' height 21' vertical clear height under rotary beams

# **MUD PUMPS**

(2) - Gardner-Denver PZ-10, 1350HP powered by (2) GE 752, 1000HP D.C. Motor

# DRILL STRING

5900' 1950 E 5" 3400' 1950 5" X95 1550' 2560 5" X95 1900' 1950 S 5"

# **BLOWOUT PREVENTERS**

(1) Shaffer 13 5/8" 10,000 psi SL double ram w/H2S trim w/ (4) 4" outlets; (1) Shaffer 13 5/8" 10,000 psi single ram w/H2S frim w/(2) 4" outlets (1) 13 5/8" 5000 psi Shaffer annular

# **MUD SYSTEM**

3 pits, 1600 bbl capacity whigh and low pressure mixing capability, Harrisburg 10 cone desilter, Harrisburg 2 cone desander, 2 FSI linear motion shale shakers.

#### COMMUNICATIONS

24 hour direct cellular telephone

#### OTHER EQUIPMENT

Blocks, Gardner-Denver 550 ton 6 sheaves 1 3/8" line

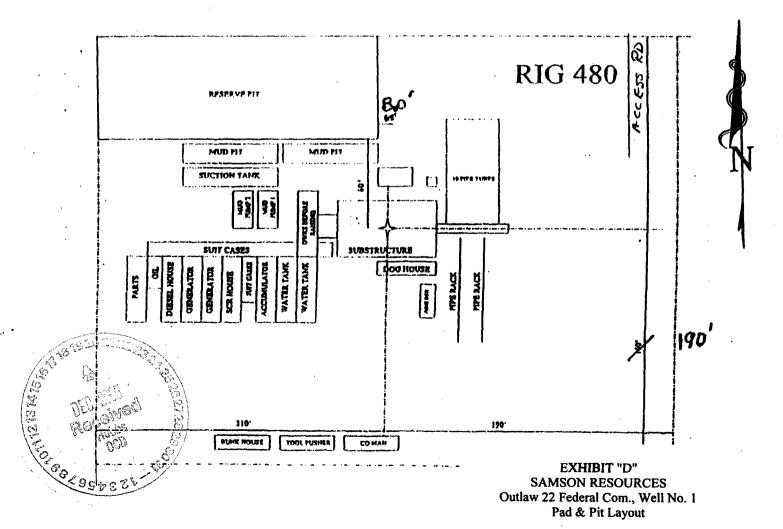
Hook. Joy 500 ton hook

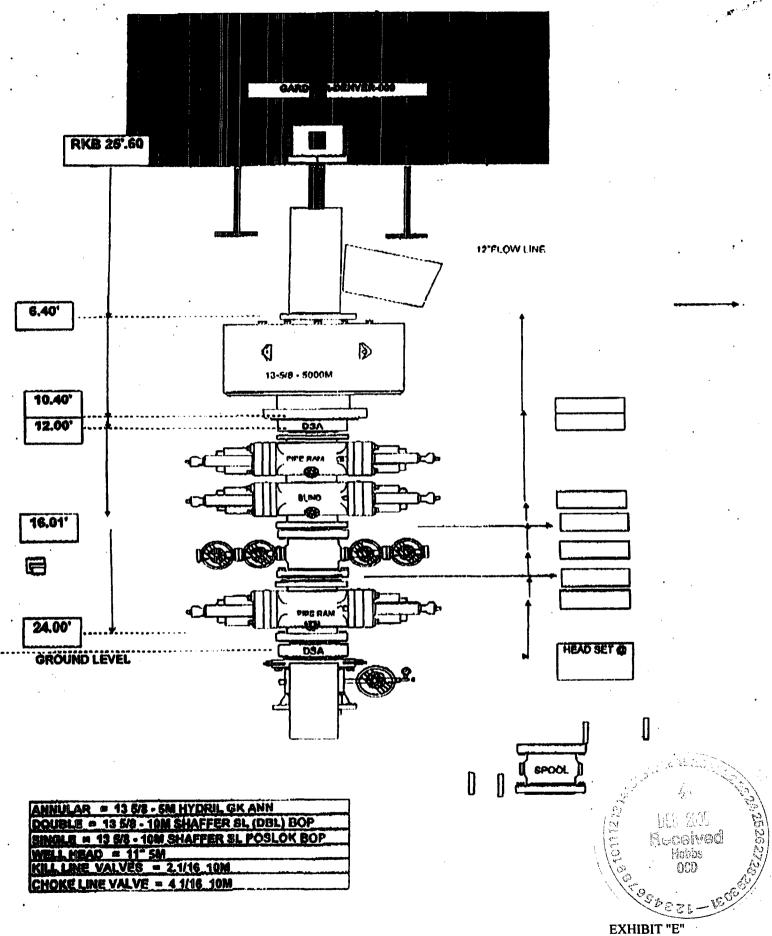
Swivel. Garner-Denver SW400, 400 tons Rolary Table. Gardner-Denver 27 1/2", 250 tons

@ 100 rpm 500 tons static

Electrical Power.

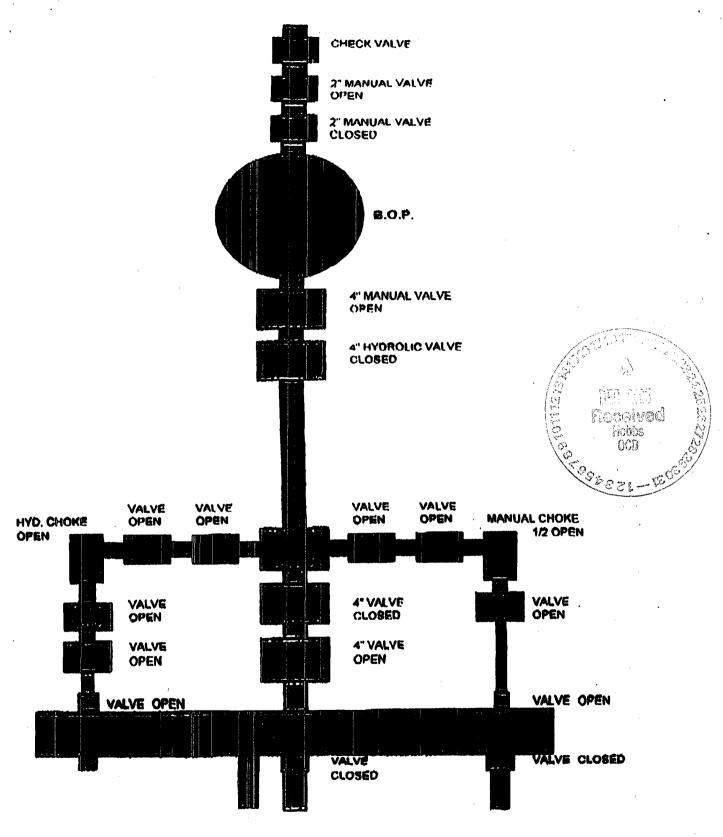
Fresh Water Storage. Housing. (2) 500 bbl





# N.D.U.S.A.

# **MANIFOLD SETUP**



# SPECIAL DRILLING STIPULATIONS

THE FOLL	OWING DA	TA IS REC	DUIRED ON	1 THE WE	ELL SIGN

Operator's Name Samson Resources Well Name & No. Outlaw 22 Federal Com. #1
Location 660 FNL & 1980 FEL Sec. 22 , T. 20 S, R 33 E.
Lease No. NM-108976 County Lea State New Mexico County Lea State New Mexico
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 office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 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.
I. SPECIAL ENVIRONMENT REQUIREMENTS
(X) Lesser Prairie Chicken (stips attached) ( ) San Simon Swale (stips attached) ( ) Other
II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING
(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 () Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.
(X) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.
( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximatelyinches in depth. Approximatelycubic yards of topsoil material will be stockpiled for reclamation.
( ) Other.
III. WELL COMPLETION REQUIREMENTS
( ) A Communitization 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: If the well is a producer, the reserve pit(s) will be backfilled when dry, 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 re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.
( ) A. Seed Mixture 1 (Loamy Sites) Side Oats Grama (Bouteloua curtipendula) 5.0 Sand Dropseed (Sporobolus cryptandrus) 1.0 Sand Lovegrass (Eragostis trichodes) 1.0 Plains Bristlegrass (Setaria magrostachya) 2.0
( ) C. Seed Mixture 3 (Shallow Sites) Side oats Grama (Boute curtipendula) 1.0  ( ) D. Seed Mixture 4 (Gypsum Sites)  Alkali Sacaton (Sporobollud airoides) 1.0  Four-Wing Saltbush (Atriplex canescens) 5.0
( ) OTHER SEE ATTACHED SEED MIXTURE
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.
( ) Other.

# \* RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

<u>Reclamation</u>: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

# OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and it capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from the BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

# CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to processed by BLM.

# TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.



# PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the following lands: All of Section 22 T. 20 S., R. 33 E.

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks know at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Bureau of Land Management Carlsbad Field Office

SENM-S-22 December 1997



#### CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Samson Resources Well No. 1 - Outlaw 22 Federal Com

Location: 660' FNL & 1980' FEL sec. 22, T. 20 S., R. 33 E.

Lease: NM-108976

#### I. DRILLING OPERATIONS REQUIREMENTS:

- 1. The Bureau of Land Management (BLM) is to be notified at (505) 393-3612 in sufficient time for a representative to witness:
- A. Spudding
- B. Cementing casing: 16 inch 11-3/4 inch 8-5/8 inch 5-1/2 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 the well by NMOCD on the subsequent report of setting the first casing string.
- 4. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface; cable speed not to exceed 30 feet per minute.
- 5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

# **II. CASING:**

- 1. <u>16</u> inch surface casing must be set <u>at approximately 1375 feet in the Rustler Anhydrite</u>, below usable water and circulate cement to the surface. If cement does not circulate to the surface this BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. 11-3/4 inch salt protection casing must be set at approximately 3510 feet (not less than 100 feet nor more than 600 feet below the Base of the Salt) and circulate cement to the surface. If cement does not circulate to the surface this BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 3. 8-5/8 inch intermediate casing must be set at approximately 5215 feet (below the Base of the Capitan Reef) and the minimum required fill of cement behind the 8-5/8 inch intermediate casing is sufficient to tie back 200 feet into the 11-3/4 inch salt protection casing set at approximately 3510 feet. If cement does not circulate to the surface, a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing may be required prior to drilling out that string. Fresh water mud shall be used to drill the hole for the 8-5/8 inch intermediate casing set at approximately 5215 feet.
- 4. Minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>sufficient to tie back 500 feet above the</u> uppermost perforation in the pay zone.
- 5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

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

1. Before drilling below the 16 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. Before drilling below the 8-5/8 inch intermediate casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.

AIRCULATO TOSURFALLO

# CONDITIONS OF APPROVAL – DRILLING (CONTINUED)

Operator's Name: Samson Resources Well No. 1 - Outlaw 22 Federal Com

Location: 660' FNL & 1980' FEL sec. 22, T. 20 S., R. 33 E.

Lease: NM-108976

#### III. PRESSURE CONTROL:

- 2. Before drilling below the <u>16</u> inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be <u>2000</u> psi. Before drilling below the <u>8-5/8</u> inch intermediate casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be <u>5000</u> psi.
- 3. After setting the <u>8-5/8</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 BLM Hobbs office shall be notified at (505) 393-3612 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 shall be reported to the BLM Hobbs Office at 414 West Taylor, Hobbs, New Mexico 88240.
- 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:**

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.



BLM Serial Number: NM-108976

Company Reference: Samson Resources Well No. & Name: Outlaw 22 Federal Com #1

# STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

# GENERAL REQUIREMENTS

- A. 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.
- B. 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 right-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 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.
- C. 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 right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.



- D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of 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.
- E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to 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.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar.

Holder agrees to comply with the following stipulations:

# ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

/\_\_/ Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

# 2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1 crown on a 12' wide road).

/\_X / Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

/\_\_/ Flat-blading is authorized on segment(s) delineated on the attached map.

# 3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

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

# SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

- B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).
- C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:



spacing interval =  $\frac{400'}{\text{road slope in }\%}$  + 100'

Example: 4% slope: spacing interval = 400 + 100 = 200 feet

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# 4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:

# STANDARD TURNOUT - PLAN VIEW

# 5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

# 6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

#### MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

# 8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

#### 9. CULTURAL RESOURCES

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.

#### 10. SPECIAL STIPULATIONS:

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

# State of New Mexico **Energy Minerals and Natural Resources**

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

38 18 20 March 12, 2004 For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

Hobbs

Form C-144

30-025-36733

# Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes \( \subseteq \text{No X} \) Type of action: Registration of a pit or below-grade tank X Closure of a pit or below-grade tank Samson Resources (Brad Hargrove) Telephone: (918) 591-1939 e-mail address: Operator: Address: Samson Plaza Two W. Second St. Tulsa, OK 74103 Facility or well name: Outlaw 22 Federal Com., Well #1 U/L or Qtr/Qtr SW4SE4 Sec 22 T 20S R33E County: Lea\_\_\_\_\_ Latitude 32'33'50.24"\_N\_\_\_\_\_ Longitude 103'38'54.41" W\_ NAD: 1927 X 1983 Surface Owner Federal X State Private Indian [ Pit Below-grade tank Type: Drilling X Production Disposal Volume: bbl Type of fluid: Workover ☐ Emergency ☐ Construction material: Double-walled, with leak detection? Yes If not, explain why not. Lined X Unlined Liner type: Synthetic X Thickness 12 mil Clay Volume 10,000 bbl+ Less than 50 feet (20 points) Depth to ground water (vertical distance from bottom of pit to seasonal high 50 feet or more, but less than 100 feet (10 points) water elevation of ground water.) 100 feet or more ( 0 points) Yes (20 points) Wellhead protection area: (Less than 200 feet from a private domestic No ( 0 points) water source, or less than 1000 feet from all other water sources ) Less than 200 feet (20 points) Distance to surface water: (horizontal distance to all wetlands, playas, 200 feet or more, but less than 1000 feet (10 points) irrigation canals, ditches, and perennial and ephemeral watercourses.) 1000 feet or more ( 0 points) Ranking Score (Total Points) -0-If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: onsite offsite for If offsite, name of facility . (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No Tyes I If yes, show depth below ground surface ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations. hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines X, a general permit 🔲, or an (attached) alternative OCD-approved plan 🔟. Date: \_September 26, 2005\_\_\_ Printed Name/Title George R. Smith, agent Signature Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the bit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations. Approval: PETROLEUM ENGINEER DEC 2 1 2005 PAUL F. KAUTZ Signature Printed Name/Title