

OCD-ARTESIA



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

Month - Year
MAR 19 2007
OCD - ARTESIA, NM

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		5. Lease Serial No. NMNM-114951
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator SAMSON RESOURCES COMPANY		7. If Unit or CA Agreement, Name and No.
3a. Address Samson Plaza, 2 West 2nd St., Tulsa, Ok 74103		8. Lease Name and Well No. Fast Draw Federal #1
3b. Phone No. (include area code) (432) 686-6313		9. API Well No. 30-015-26145
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 2125' FNL & 666' FEL At proposed prod. zone same CARLSBAD CONTROLLED WATER BASIN		10. Field and Pool, or Exploratory Robinia Draw (Morrow)
11. Sec., T. R. M. or Blk. and Survey or Area Section 5, T23S, R24E		
12. Distance in miles and direction from nearest town or post office* 23 Miles SW of Carlsbad, NM		12. County or Parish Eddy
13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 666'	16. No. of acres in lease 320.0	17. Spacing Unit dedicated to this well 320 acs
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. None	19. Proposed Depth 10,725	20. BLM/BIA Bond No. on file NM-2037
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4149' GL	22. Approximate date work will start* 2/1/07	23. Estimated duration 30 days

24. Attachments

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

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

25. Signature 	Name (Printed/Typed) Kenneth C. Dickeson	Date 12-22-06
Title Authorized Agent (432) 682-4002		

Approved by (Signature) James Stovall	Name (Printed/Typed)	Date MAR 19 2007
Title ACTING FIELD MANAGER		Office CARLSBAD FIELD OFFICE

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

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person 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)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

**APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED**

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 83920	Pool Name Robina Draw; Morran
Property Code 36654	Property Name FAST DRAW FEDERAL	Well Number 1
OGRID No. 20165	Operator Name SAMSON RESOURCES	Elevation 4149'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	5	23-S	24-E		2125	NORTH	666	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	5	23-S	24-E		1980	NORTH	660	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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

<p>LOT 4 LOT 3 LOT 2 LOT 1</p> <p>PROJECT AREA</p> <p>PRODUCING AREA</p> <p>39.70 AC 39.58 AC 39.46 AC 38.34 AC</p> <p>660' 771' 666' 104.85'</p> <p>B.H. GRID. AZ - 272°20'50" HORZ. DIST. - 3837.6' P.P. S.L. SEE DETAIL</p> <p>GEODETIC COORDINATES NAD 27 NME SURFACE HOLE LOCATION Y=485343.8 N X=444316.5 E LAT=32.334197° N LONG.=104.513617° W</p> <p>DETAIL 4142.6' 4122.3' 600' 4208.1' 4163.4'</p>			<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Rita A. Bures</i> Signature Date 8/6/07 RITA A. BURES Printed Name</p>	
<p>SURVEYOR CERTIFICATION</p> <p>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 supervision, and that the same is true and correct to the best of my belief.</p> <p>GARY G EIDSON REGISTERED PROFESSIONAL SURVEYOR NEW MEXICO DATE SURVEYED: 8/23/07 SIGNATURE & SEAL OF PROFESSIONAL SURVEYOR 6/1/07</p> <p>Certificate No. GARY EIDSON 12641 RONALD EIDSON 3239</p>				

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico
Energy, Minerals and Natural Resources Departm.

OCD-ARTESIA

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

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

OIL CONSERVATION DIVISION

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

MORROW/PENNSYLVANIAN

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code	Pool Name
Property Code	Property Name FAST DRAW FEDERAL		Well Number 1
OGRID No.	Operator Name SAMSON RESOURCES		Elevation 4149'

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UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	5	23-S	24-E		2125	NORTH	666	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320		Joint or Infill	Consolidation Code	Order No.					

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

<p>LOT 4 //</p> <p>39.70 AC</p> <p>LOT 3 //</p> <p>39.58 AC</p> <p>LOT 2 //</p> <p>39.46 AC</p> <p>LOT 1 //</p> <p>38.34 AC</p> <p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=485343.8 N X=444316.5 E</p> <p>LAT.=32.334197° N LONG.=104.513617° W</p> <p>4142.6' 4122.3' 600' 600' 4208.1' 4163.4'</p> <p>PAGE 1 OF 2 SEE PAGE 2 IF NO PRODUCTION ON PAGE 1</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest of unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>Kenneth C. Dickeson</i> Date: 12-21-06</p> <p>Printed Name: Kenneth C. Dickeson</p> <p>SURVEYOR CERTIFICATION</p> <p>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 supervision, and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 18, 2006</p> <p>Date Surveyed: _____ LA</p> <p>Signature: <i>Ronald E. Eidson</i> Professional Surveyor</p> <p>Professional Surveyor Seal: RONALD E. EIDSON 06111467</p> <p>Certification No. GARY EIDSON 12641 RONALD EIDSON 3239</p>
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February 28, 2007

Mr. Wesley Ingram
BUREAU OF LAND MANAGEMENT
620 E. Greene
Carlsbad, NM 88220

RE: Application for Permit to Drill – NMNM-114951
*SAMSON RESOURCES – **Fast Draw Federal #1 Well***
2,125' FNL & 666' FEL Section 5, T-23-S, R-24-E, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

Dear Mr. Ingram:

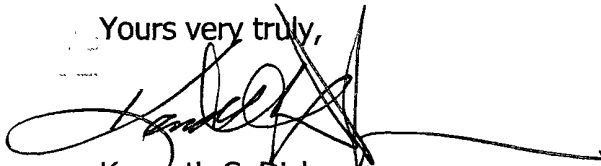
In connection with the captioned application, enclosed herewith are revised plats for the well. One shows the spacing orientation for the horizontal Cisco with the bottom hole location indicated. The other shows the orientation for a Morrow/Pennsylvanian completion. We are also enclosing a revised copy of the BOP diagram and rig layout.

Please be advised that the mud weight to be carried below the intermediate casing will be in the range of 9 to 9.5 lbs.

Please be advised that in the event the Cisco formation is productive, the wellbore will be produced from both the vertical and horizontal leg.

Thank you for your cooperation in this matter. Should you have any questions, please advise.

Yours very truly,



Kenneth C. Dickeson

Enclosures

Tblm(FastDraw)

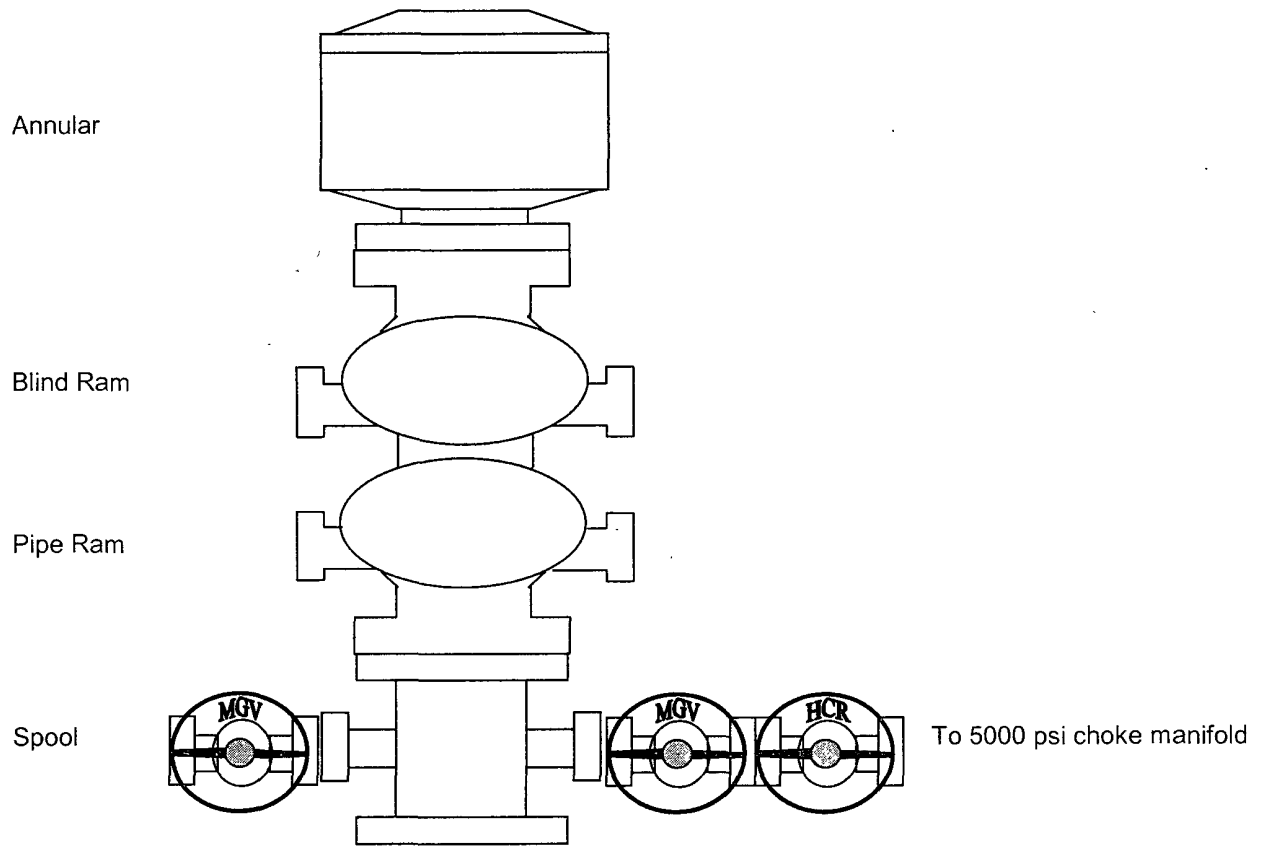
Reenter, Test Morrow, Penn, Cisco, Drill Cisco Horizontal
Procedure

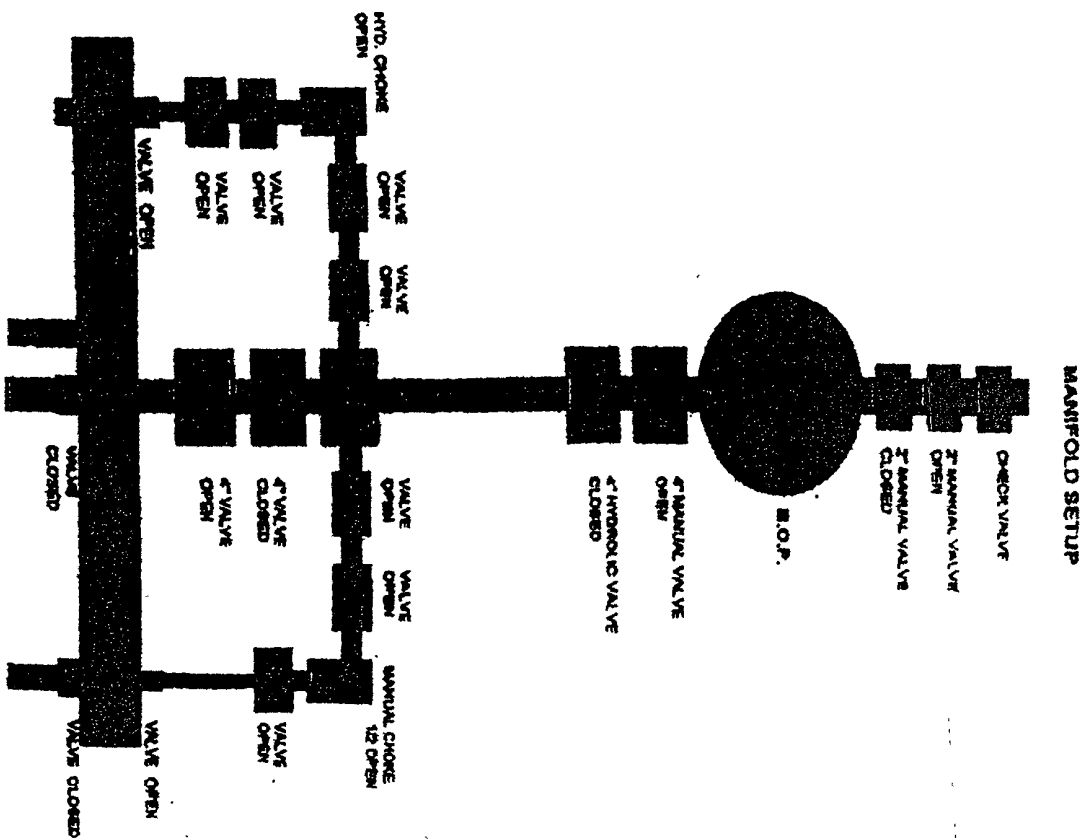
1. Construct road, location and pit.
2. Dig out wellhead. Weld on 8 5/8 SOW x 11" 5000 psi casing head.
3. RU horizontal rig package. NU 5k SRRA BOP stack. Test to 5k, A to 1500 psi.
4. PU 6 1/2" DC, bit. DO surface plug.
5. GIH w/ 7 7/8" MT bit, DC's on 3 1/2" drill pipe. Circ w/ 9 ppg BW.
6. Tag plug @ 8 5/8" shoe @ 2300'. Test casing to 1500 psi.
7. Drill out plugs to TD. Sweep hole as needed.
8. Run 20 RFT's and 20 SWC's. Corr to HLS CNL LDT dated 8/21/69.
9. GIH. Circ and condition hole.
10. POH LD DP.
11. Run 5 1/2" 17# P110 LTC w/ FS, FC, MJ, cent across zones of interest.
12. Circ csg volume. Cmt w/ CI H w/ add. TOC 7500'. Disp w/ 4% KCl.
13. ND BOP. Set slips in full tension. Cutoff. NU tbg hd. Run TS and tag TD.
14. Rig down horizontal rig to frac and test Morrow.
15. RU 2 10k 7-1/16" frac valves.
16. RU flowback equipment, test tank, manifold separator etc.
17. RU WL and 5k lubricator.
18. Run GR CCL f/ PBD to 8000'
19. Perf Lower Morrow w/ 2 spf (Total 32 holes)
10433-35, 10482-90, 10636-40, 10662-66
20. RU frac head.
21. Frac Morrow w/ 100000 gal 70Q foam and 100000# 20/40 ISP at 45 BPM and 6500 psi.
22. Flowback and test.
If commercial,
23. Lubricate 10k ret pkr, on off tool w/ 1.81" profile, 8' x 2 3/8 sub, 1.81" nipple, pump out plug. Set @ 10300'
24. Load hole. ND frac valves. NU BOP.
25. GIH w/ 2 3/8" 4.7# L80 EUE 8rd.
26. Space out. Circ pkr fluid. Test ann to 1000. ND BOP. NU tree.
27. Flow test.
If not commercial,
28. RU WL. Set CIBP @ 10400'. Dump 35' cmt. Test csg to 1000.
29. ND frac valves. NU BOP.
30. Perf Penn (Atoka / Strawn) interval w/ 1 spf. (22 holes)
8794, 8802, 8850, 8914, 22, 48, 63, 9033, 9174, 9238, 9308, 9386, 9520, 34, 9625, 9714, 9764,
9862, 9902, 35, 10035, 48.
31. GIH w/ 10k ret pkr and on off tool on 2 3/8" 4.7# L80 EUE 8rd.
32. Spot acid across perms. ND BOP. NU tree.
33. Acidize w/ 4500 gal 15% NEFE dropping 33 BS. Ball out.
34. Swab test.
If not commercial,
35. Kill well. ND tree. NU BOP. POH.
36. RU WL. Set CIBP @ 8770'. Test csg to 1000. Dump 35' cmt.
37. Perf Cisco w/ 1 spf (15 holes)
8440, 47, 52, 74, 8504, 14, 26, 62, 71, 82, 8604, 16, 33, 54, 60.
38. GIH w/ 10k ret pkr and on off tool on 2 3/8" 4.7# L80 EUE 8rd.
39. Spot acid across perms. ND BOP. NU tree.
40. Acidize w/ 4500 gal 15% NEFE dropping 23 BS. Ball out.
41. Swab test.
42. Kill well. ND tree. NU BOP. POH.
43. RU WL. Set CIBP @ approx 8300'. Test csg to 1000.
44. RU WL. Run gyro survey.
45. GIH w/ whipstock on 3 1/2" drill pipe. Orient WS due west.
46. Mill window.
47. Drill curve. Drill horizontal to maximum displacement of 3900'
48. POH. GIH w/ 3 1/2" 9.3# L80 EUE 8rd pre perforated liner, liner hanger pkr.
49. POH LD DP.
50. NU 2 7 1/16" 10k frac valves. Acidize lateral w/ 100000 gal 15% NEFE at 60 BPM and 7500 psi.
51. RU WL and 5k lubricator.
52. RIH w/ 10k ret pkr w/ on off tool w/ 1.81" profile, 8' x 2 3/8" sub, 1.81" nipple, pump out plug
53. Set pkr @ approx 8200'.
54. Load hole. ND frac valves. NU BOP.
55. GIH w/ 2 3/8" 4.7# L80 EUE 8rd.
56. Space out. Circ pkr fluid. Test ann to 1000. ND BOP. NU tree.
57. Flow test.

CURRENT WELLBORE

WELL NAME: Fast Draw Federal #1		FIELD: Eddy		OPER: LOCATION: 5-23S-24E; 2310' FNL & 660' FEL									
STATE: NM		COUNTY: Eddy		FORMATION:									
API NO: 30-015-26145		SPUD DATE: 7/18/1989		ELEVATION: 4153' GL, KB 4166' (13')									
TD: 10725'		PBDT: P&A 8/24/89											
PIPE RECORD								CEMENT & HOLE DATA					
CSG	OD	GRADE	THD	WT/FT	TOP	BTM	# JTS	BIT SIZE	DEPTH	SX	WT.	TOC	
Surf	13.375"	J55	BTC	68.0#	0'	430'		17.500"		400		Surf	
Inter	8.625"	J55	STC	32.0#	0'	2350'		12.250" 11.500"		730		Surf	
Tbg													
Remarks:								CAPACITIES (bbl/ft) (ft/bbl) (c/ft)					
								TBG: in. #					
								CSG: 8.625 in. 32#					
								VOLUME BETWEEN (bbl/ft) (ft/bbl) (c/ft)					
								TBGxCSG: x8.625					
								TBGxCSG:					
								CSGxHOLE:					
								TBGxHOLE:					
								TBGxHOLE:					
								PERFORATION RECORD					
								DATE	TOP	BTM	ZONE	STATUS	SPF
								TUBULAR GOODS PERFORMANCE					
								Material	ID (in)	Drift (in)	Collapse* (psi)	Burst* (psi)	Tensile* (lbs)
								13.375" J55 BTC 68#					
								8.625" J55 STC 32#					
								" #					
								* Safety Factor Not Included					
San Andres 1200'													
Bone Spring 3600'													
Wlfomp 7675'													
Strawn 8720'													
Atoka 9690'													
Morrow 10053'													
Barnett 10683'													
SRC Wt%: 100 NRI%: 87.5													
LOGS:													
LANDMAN:								GEOLOGIST:					
7625' Tbg@'													
7725'													
9900'													
10050'													
TD:10725' OH													
PREPARED BY: R. Burditt								OFFICE:					
DATE: 9/10/2006								FAX:					

**Fast Draw Federal #1
5000 psi SRRA BOP**

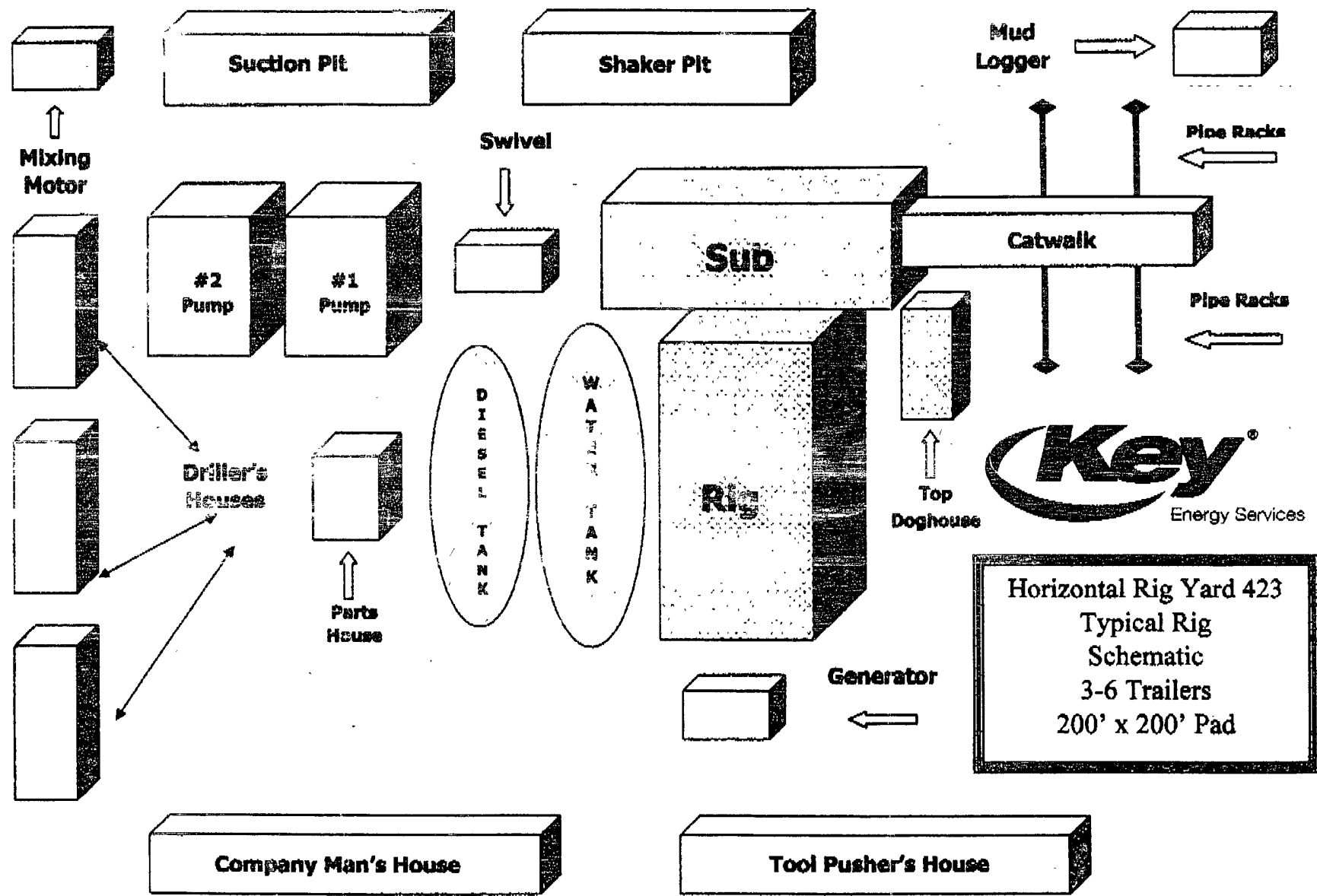




TO TODD SUTER

From Duke Koush

W.M.F. Fast Draw Well



SURFACE USE AND OPERATIONS PLAN

FOR

**SAMSON RESOURCES COMPANY
FAST DRAW FEDERAL #1
2125' FNL & 666' FEL OF SECTION 5, T23S, R24E
EDDY COUNTY, NEW MEXICO**

LOCATION:	23 miles southwest of Carlsbad, New Mexico.
FEDERAL LEASE NUMBER:	NMNM-114951
LEASE DATE:	12-1-05
ACRES IN LEASE:	1,213.73
RECORD LESSEE:	Samson Resources Company
SURFACE OWNERSHIP:	Federal
GRAZING PERMITEE:	Davidson Ranch Queen Route Carlsbad, NM 88220
POOL:	Robinia Draw (Morrow)
POOL RULES:	320 acres for Morrow
EXHIBITS:	A. Road Map and Topo Plat B. Plat Showing Existing wells. B-1. Plat showing Existing roads. C. Drilling Rig Layout

1. EXISTING ROADS

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. From the intersection of Dark Canyon Road and Queens Highway go southeast on Dark Canyon Road approximately 4.0 miles. Turn left and go northeast approximately 3.8 miles. Turn left and go west-northwest approximately 1.4 miles to this location. Also see Exhibits "B" and "D."
- B. Exhibit "B" shows existing pertinent roads in the vicinity of the proposed reentry.

2. PLANNED ACCESS ROADS:

- A. Length and Width: The access road to the well is existing. No new road construction will be required.
- B. Surfacing Material: Caliche. Watered, compacted and graded.
- C. Maximum Grade: Less than one percent.
- D. Turnouts: As required.
- E. Drainage Design: As required.
- F. Culverts: None needed.
- G. Cuts and Fills: None necessary.
- H. Gates and Cattle Guards: Not needed. No fences involved.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells in the immediate area are shown on Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Production Facilities will be placed on the well location pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is not planned that a water well will be drilled. Water necessary for drilling operations will be purchased and trucked to the well site, or will be moved to the site by a temporary pipeline laid on the ground alongside existing and proposed roads.

6. SOURCE OF CONSTRUCTION MATERIAL:

- A. Caliche needed for construction work will be taken, if present, from on-site within the 400' X 450' work area. Otherwise, caliche will be taken from an existing pit located nearby, and will be trucked to the site over existing and proposed roads.

7. METHODS OF HANDLING WASTE MATERIAL:

- 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. All trash, junk, and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill.
- D. Water produced during test will be disposed of in the drilling pits.
- E. Oil produced during tests will be stored in test tanks until sold.

8. ANCILLARY FACILITIES

- A. None necessary.

9. WELL SITE LAYOUT:

- A. Exhibit "C" shows relative location and dimensions of the well pad, mud pits, reserve pit and the location of major drilling rig components.
- B. Clearing and leveling of the well site will be required.
- C. The pad and pit area is staked and flagged.

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 will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until the pits are dry.
- C. After abandonment, all equipment, trash and junk will be removed and the well site will be cleaned. Any special rehabilitation and/or special revegetation requirements of the surface management agency will be complied with and will be accomplished as rapidly as possible.

11. OTHER INFORMATION:

- A. Topography: The land surface in the area limestone hills and ephemeral drainage.
- B. Soil: Top soil at the well site is loamy and caliche.
- C. Flora and Fauna: The vegetative cover is moderate and includes mesquite, juniper, Osoto, agave, weeds and range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: There are no rivers, ponds, lakes, or streams in the area.
- E. Residences and Other Structures: There are no occupied dwellings or other structures within a mile of the proposed well site.
- F. Archaeological, Historical, and Cultural Sites: An archaeological reconnaissance has been accomplished and a report furnished.
- G. Land Use: Grazing and wildlife habitat.
- H. Surface Ownership: Federal.


12. OPERATOR'S REPRESENTATIVE:

Ron Johnson
Samson Resources
200 N. Loraine, Suite 1010
Midland, TX 79701
(432) 686-6302

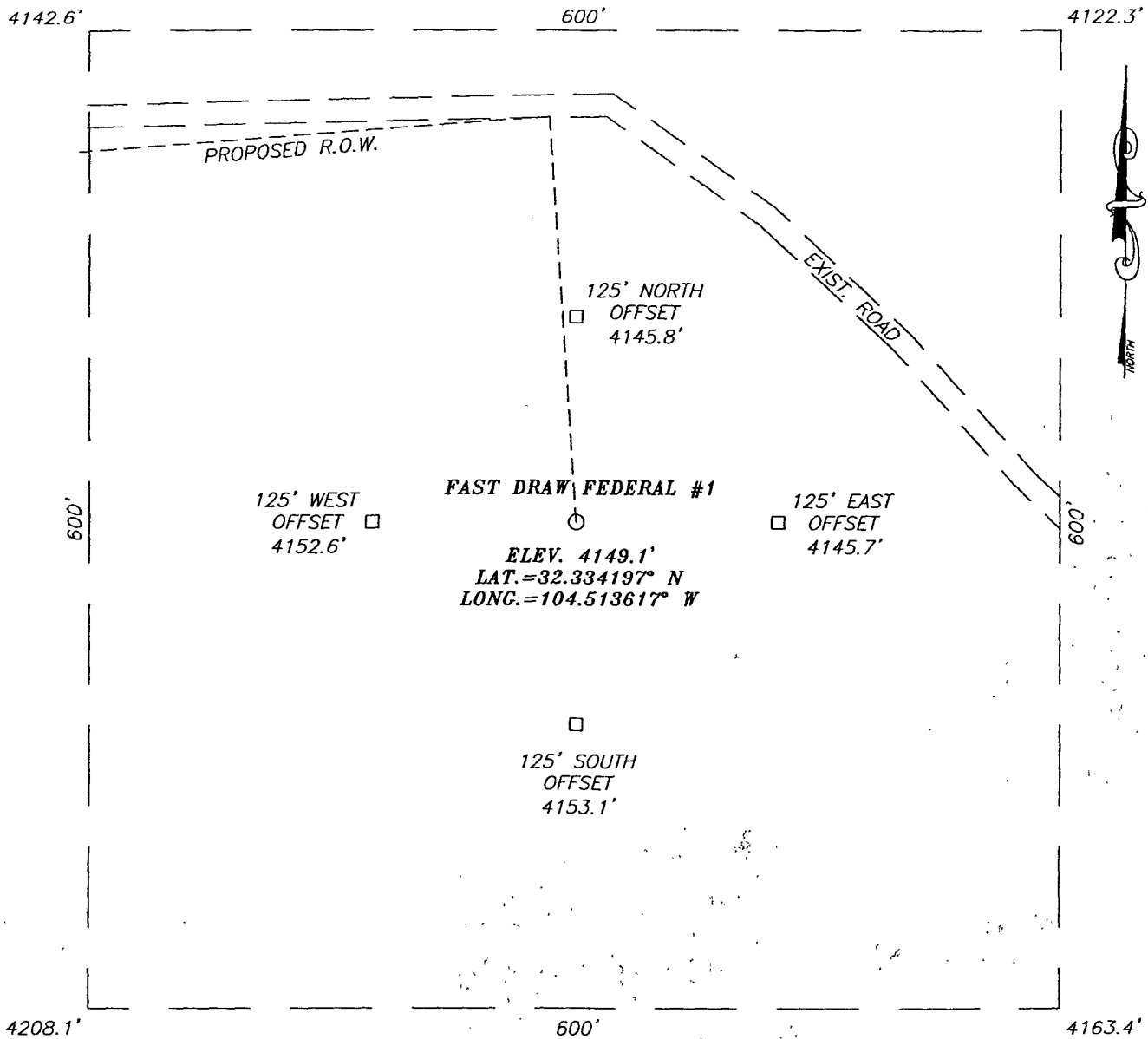
13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Pogo Producing Company and its contractors and sub-contractors 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 filling of false statement.

12-22-06
Date

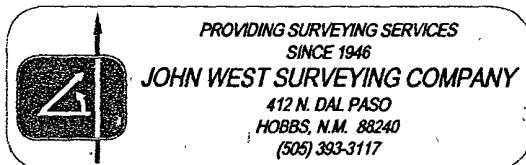
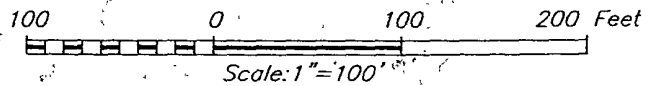

Kenneth C. Dickeson
Authorized Agent

SECTION 5, TOWNSHIP 23 SOUTH, RANGE 24 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF DARK CANYON ROAD AND QUEENS HWY. GO SOUTHEAST ON DARK CANYON ROAD APPROX. 4.0 MILES. TURN LEFT AND GO NORTHEAST APPROX. 3.8 MILES. TURN LEFT AND GO WEST-NORTHWEST APPROX. 1.4 MILES TO THIS LOCATION.



SAMSON RESOURCES

FAST DRAW FEDERAL #1 WELL
 LOCATED 2125 FEET FROM THE NORTH LINE
 AND 666 FEET FROM THE EAST LINE OF SECTION 5,
 TOWNSHIP 23 SOUTH, RANGE 24 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 9/18/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.1467	Dr By: LA
Date: 9/26/06	Disk: CD#5
06111467	Scale: 1"=100'

Conditions of Approval

Cave and Karst

EA#: NM-520-07-0331

Lease #: NM-114951

Samson Resources Company

Fast Draw Federal No.1

Re-Entry

Cave/Karst Surface Mitigation

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

Berming:

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

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

Closed Mud System with Buried Cuttings Pit:

All fluids will be in steel tanks and hauled off. If needed a 120 X 120 foot cuttings pit can be utilized for this location. The cuttings pit will be lined with 4 oz. felt and a layer of 20 mil. plastic. Upon completion of the well all excess fluids will be vacuumed off the cuttings pit and allowed to dry. The pit liner will then be folded over the cuttings, covered with a 20 mil plastic cover and then covered with at least three feet of top soil.

Cave/Karst Subsurface Mitigation

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

Rotary Drilling with Fresh Water:

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

Casing:

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

Cementing:

All new casing strings will be cemented to the surface.

Lost Circulation:

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

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

Delayed Blasting:

Any blasting will be a phased and time delayed.

Abandonment Cementing:

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

Pressure Tests:

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

Record Keeping:

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

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Samson Resources Company
Well Name & No. 1-Fast Draw Federal
Location: 2125FNL, 0666FEL, Section 5, T-23-S, R-24-E
Lease: NMNM-114951

.....

I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
1. Spudding well
 2. Setting and/or Cementing of all casing strings
 3. BOPE tests
- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. **Although no H2S has been reported in this area, it is always a possible hazard.**
- C. 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.
- D. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

II. CASING:

- A. The 13-3/8 inch surface casing casing is existing and is set at 430 feet and cemented to surface.
- B. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is existing and is set at 2350 feet and cement circulated to surface.
- Possible lost circulation in the Wolfcamp.**
- C. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall circulate to surface due to cave/karst.
- D. 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.

III. PRESSURE CONTROL:

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53. **Valve sizes and layout for manifold and BOP are to comply with Onshore Order No. 2.**
- B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 8-5/8" intermediate casing shoe shall be **3000 (3M) PSI.**
- D. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - 1. The tests shall be done by an independent service company.
 - 2. The results of the test shall be reported to the appropriate BLM office.
 - 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
 - 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - 5. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp (formation). This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

Mud weight below previously set 8-5/8" casing will range between 9-9.5 ppg.

Engineer on call phone: 505-706-2779

WWI 021507



Samson Resources

Eddy County, NM (NAD27 NME)

Fast Draw Federal #1

Fast Draw Federal #1

OH

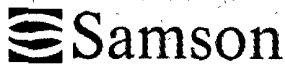
Plan: Plan #1

Standard Planning Report

13 April, 2007



Scientific Drilling
Directional Drilling Operations



Scientific Drilling
Planning Report



Database: EDM 2003.16 Single User Db
Company: Samson Resources
Project: Eddy County, NM (NAD27 NME)
Site: Fast Draw Federal #1
Well: Fast Draw Federal #1
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Fast Draw Federal #1
TVD Reference: WELL @ 0.0ft (Original Well Elev)
MD Reference: WELL @ 0.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project: Eddy County, NM (NAD27 NME)

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)
Map Zone: New Mexico East 3001

System Datum: Mean Sea Level

Site: Fast Draw Federal #1

Site Position: Northing: ft Latitude:
From: None Easting: ft Longitude:
Position Uncertainty: 0.0 ft Slot Radius: ft Grid Convergence: 0 00 °

Well: Fast Draw Federal #1

Well Position: +N/-S 0.0 ft Northing: 0 00 ft Latitude: 30° 59' 24.512 N
+E/-W 0.0 ft Easting: 0 00 ft Longitude: 105° 55' 44 137 W
Position Uncertainty: 0 0 ft Wellhead Elevation: ft Ground Level: 0.0 ft

Wellbore: OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/13/2007	8.95	58 67	48,030

Design: Plan #1

Audit Notes:

Version: Phase: PLAN Tie On Depth: 0 0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0 0	0 0	0.0	272 17

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0 0	0.00	0.00	0.0	0.0	0 0	0.00	0 00	0.00	0.00	
8,389.0	0.00	0 00	8,389.0	0.0	0 0	0.00	0.00	0.00	0 00	
8,689.0	90.00	272.17	8,580.0	7.2	-190 8	30.00	30.00	-29.28	272 17	
12,460.9	90.00	272 17	8,580.0	150.0	-3,960.0	0.00	0.00	0.00	0 00	PBHL-FDF #1

Database: EDM 2003.16 Single User Db
Company: Samson Resources
Project: Eddy County, NM (NAD27 NME)
Site: Fast Draw Federal #1
Well: Fast Draw Federal #1
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Fast Draw Federal #1
TVD Reference: WELL @ 0 0ft (Original Well Elev)
MD Reference: WELL @ 0 0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
8,389.0	0.00	0.00	8,389.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP 8389' start build 30.00°/100'									
8,400.0	3.30	272.17	8,400.0	0.0	-0.3	0.3	30.00	30.00	0.00
8,500.0	33.30	272.17	8,493.9	1.2	-31.3	31.4	30.00	30.00	0.00
8,600.0	63.30	272.17	8,559.6	4.0	-105.1	105.2	30.00	30.00	0.00
8,689.0	90.00	272.17	8,580.0	7.2	-190.8	191.0	30.00	30.00	0.00
EOC - hold 90.00°									
8,700.0	90.00	272.17	8,580.0	7.6	-201.8	202.0	0.00	0.00	0.00
8,800.0	90.00	272.17	8,580.0	11.4	-301.8	302.0	0.00	0.00	0.00
8,900.0	90.00	272.17	8,580.0	15.2	-401.7	402.0	0.00	0.00	0.00
9,000.0	90.00	272.17	8,580.0	19.0	-501.6	502.0	0.00	0.00	0.00
9,100.0	90.00	272.17	8,580.0	22.8	-601.6	602.0	0.00	0.00	0.00
9,200.0	90.00	272.17	8,580.0	26.6	-701.5	702.0	0.00	0.00	0.00
9,300.0	90.00	272.17	8,580.0	30.4	-801.4	802.0	0.00	0.00	0.00
9,400.0	90.00	272.17	8,580.0	34.1	-901.3	902.0	0.00	0.00	0.00
9,500.0	90.00	272.17	8,580.0	37.9	-1,001.3	1,002.0	0.00	0.00	0.00
9,600.0	90.00	272.17	8,580.0	41.7	-1,101.2	1,102.0	0.00	0.00	0.00
9,700.0	90.00	272.17	8,580.0	45.5	-1,201.1	1,202.0	0.00	0.00	0.00
9,800.0	90.00	272.17	8,580.0	49.3	-1,301.1	1,302.0	0.00	0.00	0.00
9,900.0	90.00	272.17	8,580.0	53.1	-1,401.0	1,402.0	0.00	0.00	0.00
10,000.0	90.00	272.17	8,580.0	56.9	-1,500.9	1,502.0	0.00	0.00	0.00
10,100.0	90.00	272.17	8,580.0	60.6	-1,600.8	1,602.0	0.00	0.00	0.00
10,200.0	90.00	272.17	8,580.0	64.4	-1,700.8	1,702.0	0.00	0.00	0.00
10,300.0	90.00	272.17	8,580.0	68.2	-1,800.7	1,802.0	0.00	0.00	0.00
10,400.0	90.00	272.17	8,580.0	72.0	-1,900.6	1,902.0	0.00	0.00	0.00
10,500.0	90.00	272.17	8,580.0	75.8	-2,000.6	2,002.0	0.00	0.00	0.00
10,600.0	90.00	272.17	8,580.0	79.6	-2,100.5	2,102.0	0.00	0.00	0.00
10,700.0	90.00	272.17	8,580.0	83.3	-2,200.4	2,202.0	0.00	0.00	0.00
10,800.0	90.00	272.17	8,580.0	87.1	-2,300.3	2,302.0	0.00	0.00	0.00
10,900.0	90.00	272.17	8,580.0	90.9	-2,400.3	2,402.0	0.00	0.00	0.00
11,000.0	90.00	272.17	8,580.0	94.7	-2,500.2	2,502.0	0.00	0.00	0.00
11,100.0	90.00	272.17	8,580.0	98.5	-2,600.1	2,602.0	0.00	0.00	0.00
11,200.0	90.00	272.17	8,580.0	102.3	-2,700.0	2,702.0	0.00	0.00	0.00
11,300.0	90.00	272.17	8,580.0	106.1	-2,800.0	2,802.0	0.00	0.00	0.00
11,400.0	90.00	272.17	8,580.0	109.8	-2,899.9	2,902.0	0.00	0.00	0.00
11,500.0	90.00	272.17	8,580.0	113.6	-2,999.8	3,002.0	0.00	0.00	0.00
11,600.0	90.00	272.17	8,580.0	117.4	-3,099.8	3,102.0	0.00	0.00	0.00
11,700.0	90.00	272.17	8,580.0	121.2	-3,199.7	3,202.0	0.00	0.00	0.00
11,800.0	90.00	272.17	8,580.0	125.0	-3,299.6	3,302.0	0.00	0.00	0.00
11,900.0	90.00	272.17	8,580.0	128.8	-3,399.5	3,402.0	0.00	0.00	0.00
12,000.0	90.00	272.17	8,580.0	132.6	-3,499.5	3,502.0	0.00	0.00	0.00
12,100.0	90.00	272.17	8,580.0	136.3	-3,599.4	3,602.0	0.00	0.00	0.00
12,200.0	90.00	272.17	8,580.0	140.1	-3,699.3	3,702.0	0.00	0.00	0.00
12,300.0	90.00	272.17	8,580.0	143.9	-3,799.3	3,802.0	0.00	0.00	0.00
12,400.0	90.00	272.17	8,580.0	147.7	-3,899.2	3,902.0	0.00	0.00	0.00
12,460.9	90.00	272.17	8,580.0	150.0	-3,960.0	3,962.8	0.00	0.00	0.00

PBHL-DFD #1

Database: EDM 2003.16 Single User Db
Company: Samson Resources
Project: Eddy County, NM (NAD27 NME)
Site: Fast Draw Federal #1
Well: Fast Draw Federal #1
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well Fast Draw Federal #1
TVD Reference: WELL @ 0.0ft (Original Well Elev)
MD Reference: WELL @ 0.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets

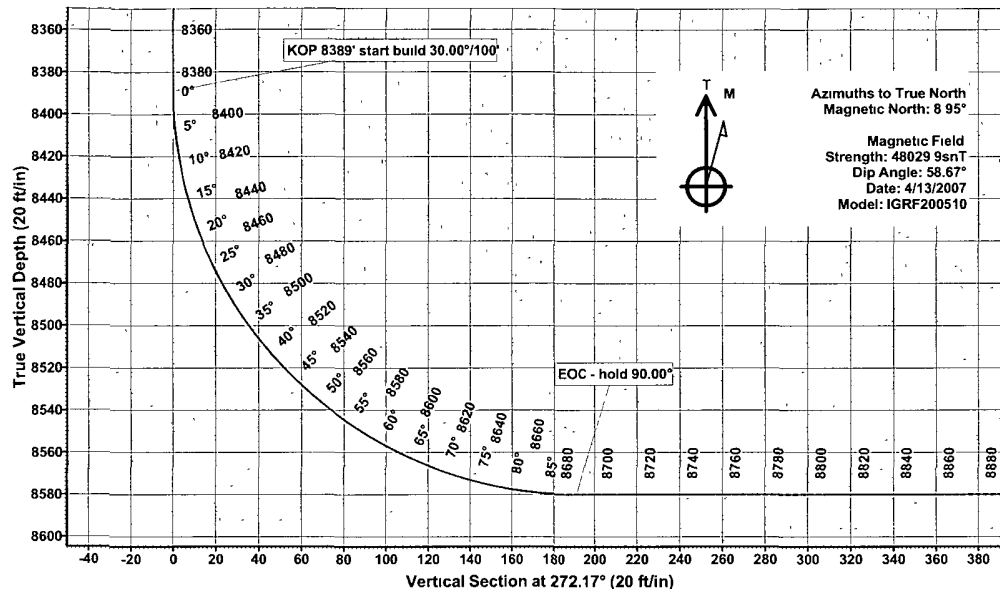
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
PBHL-FDF #1	0.00	0.00	8,580.0	150.0	-3,960.0	206.78	-3,957.44	30° 59' 25.994 N	105° 56' 29.621 W
- plan hits target									
- Point									

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	
8,389.0	8,389.0	0.0	0.0	KOP 8389' start build 30.00°/100°
8,689.0	8,580.0	7.2	-190.8	EOC - hold 90.00°



Scientific Drilling for Samson Resources
Site: Eddy County, NM (NAD27 NME)
Well: Fast Draw Federal #1
Wellbore: OH
Design: Plan #1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	8389.0	0.00	0.00	8389.0	0.0	0.0	0.00	0.00	0.0	
3	8689.0	90.00	272.17	8580.0	7.2	-190.8	30.00	272.17	191.0	
4	12460.9	90.00	272.17	8580.0	150.0	-3960.0	0.00	0.00	3962.8	PBHL-FDF #1

WELL DETAILS. Fast Draw Federal #1

+N-S	+E-W	Northing	Ground Level:	Easting	Latitude	Longitude	Slot
0.0	0.0	0.00	0.0	0.00	30° 59' 24.512 N	105° 55' 44.137 W	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

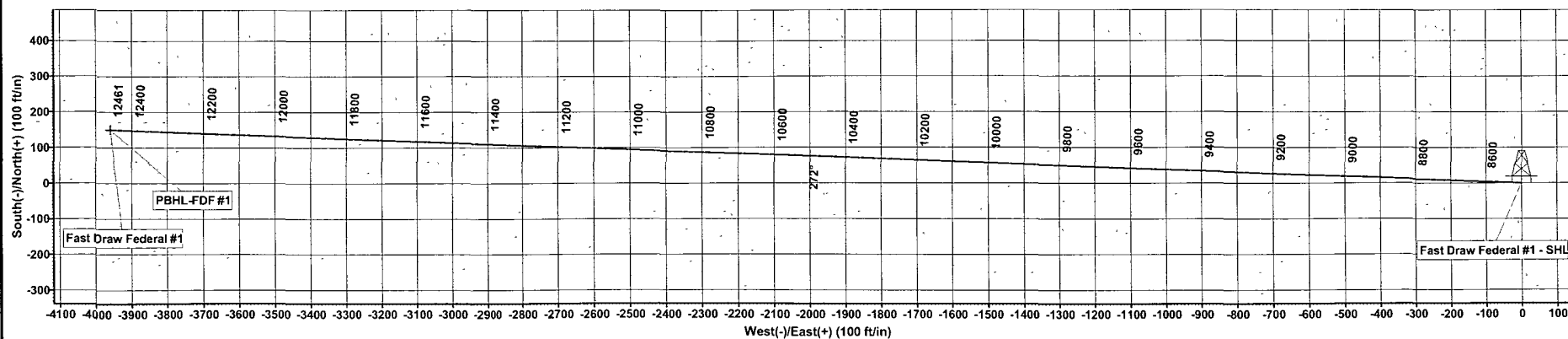
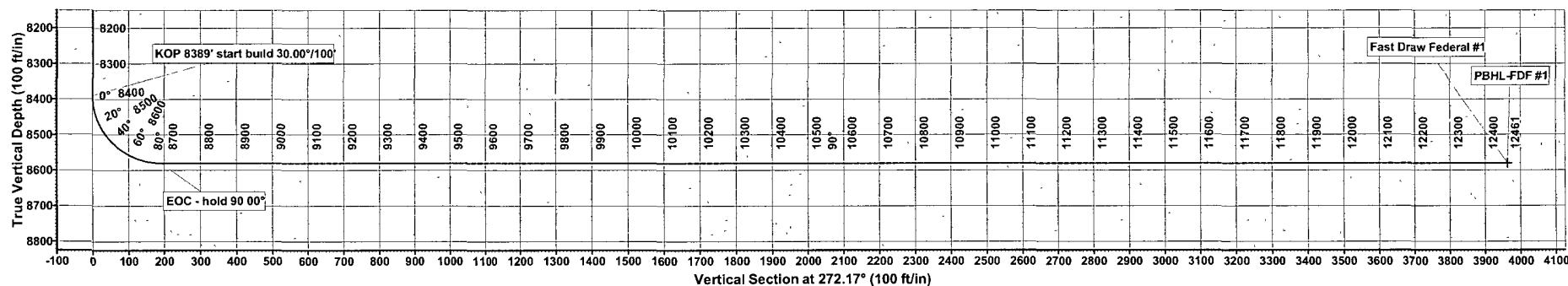
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape
PBHL-FDF #1	8580.0	150.0	-3960.0	206.78	-3957.4430° 59'	25.994 N 105° 56'	29.621 W	Point

PROJECT DETAILS: Eddy County, NM (NAD27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

Plan: Plan #1 (Fast Draw Federal #1/OH)

Created By: Julio Pina Date: 13-Apr-07
Checked: _____ Date: _____
Reviewed: _____ Date: _____
Approved: _____ Date: _____



State of New Mexico

DISTRICT I

1026 N. FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code		Pool Name		
Property Code		Property Name FAST DRAW FEDERAL				Well Number 1
OGRID No.		Operator Name SAMSON. RESOURCES				Elevation 4149'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	5	23-S	24-E		2125	NORTH	666	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	5	23-S	24-E		1980	NORTH	660	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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

<p>LOT 4</p> <p>LOT 3</p> <p>LOT 2</p> <p>LOT 1</p> <p>BOTTOM HOLE LOCATION Y=485494.2 N X=440376.5 E</p> <p>39.70 AC</p> <p>39.58 AC</p> <p>39.46 AC</p> <p>38.34 AC</p> <p>1980'</p> <p>660'</p> <p>B.H.</p> <p>GRID. AZ - 272°11'05"</p> <p>HORZ. DIST. - 3944.0'</p> <p>2125'</p> <p>S.L.</p> <p>SEE DETAIL</p> <p>GEODETIC COORDINATES NAD 27 NME SURFACE HOLE LOCATION Y=485343.8 N X=444316.5 E</p> <p>LAT.=32.334197° N LONG.=104.513617° W</p> <p>DETAIL</p> <p>4142.6'</p> <p>4122.3'</p> <p>600'</p> <p>4208.1'</p> <p>4163.4'</p>	<h3>OPERATOR CERTIFICATION</h3> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p> <h3>SURVEYOR CERTIFICATION</h3> <p>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 supervision, and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 18, 2006</p> <p>Date Surveyed LA REV: 4/24/07</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Gary A. Eidson</i> 4/25/07</p> <p>07.13.0550</p> <p>Certificate No. GARY EIDSON 12641 RONALD EIDSON 3239</p>
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