

New Mexico Oil Conservation Division, District I

1625 N. French Drive

Hobbs, NM 88240

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5. Lease Serial No.
NM-14155

6. If Indian, Allottee or Tribe Name

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
Derby 13 Federal, Well No. 1

9. API Well No.
30-025-37058

10. Field and Pool, or Exploratory
Hat Mesa Morrow

11. Sec., T., R., M., or Blk. and Survey or Area
Sec. 13-T21S-R32E

12. County or Parish
Lea

13. State
NM

1a. Type of Work: ☒ DRILL ☐ REENTER R-111-POTASH

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

2. Name of Operator

Samson Resources

3a. Address

Samson Plaza-Two W. 2nd St. Tulsa, OK 74103

3b. Phone No. (include area code)

(918) 591-1822

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface 990' FSL & 950' FWL Unit M SUBJECT TO LIKE
At proposed prod. zone 1980' FSL & 660' FWL APPROVAL BY STATE

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

50 miles northeast of Carlsbad, NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

660'

16. No. of Acres in lease

600

17. Spacing Unit dedicated to this well

320

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

2700'

19. Proposed Depth

14,500'

20. BLM/BIA Bond No. on file

NM-2037

21. Elevations (Show whether DF, KIDB, RT, GL, etc.)
3908' GL

22. Approximate date work will start*
2/14/05

23. Estimated duration
5 weeks

24. Attachments

CARLSBAD CONTROLLED WATER BASIN

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

1. Well plat certified by a registered surveyor.

2. A Drilling Plan.

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).

4. Bond to cover the operations unless covered by an existing bond on file (see
Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the
authorized officer.

25. Signature

George R. Smith

Name (Printed/Typed)

George R. Smith

Date

9/2/04

Title

Agent for Samson Resources

Approved by (Signature)

/s/ Linda S. C. Rundell

Name (Printed/Typed)

/s/ Linda S. C. Rundell

JAN 11 2005

Title

STATE DIRECTOR

Office

NM STATE 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 reverse)

Lease Responsibility Statement: Samson Resources Co. accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

George R. Smith, agent
OPER. OGRID NO. 20165
PROPERTY NO. 34558
POOL CODE 78240
EFF. DATE 1/20/05
API NO. 30-025-37058

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

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

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-37058	Pool Code 78240	Pool Name Hat Mesa Morrow
Property Code 34558	Property Name DERBY "13" FEDERAL COM	Well Number 1
OGRID No. 20165	Operator Name SAMSON RESOURCES	Elevation 3908'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	13	21-S	32-E		990'	SOUTH	950'	WEST	LEA

Bottom Hole Location If Different From Surface

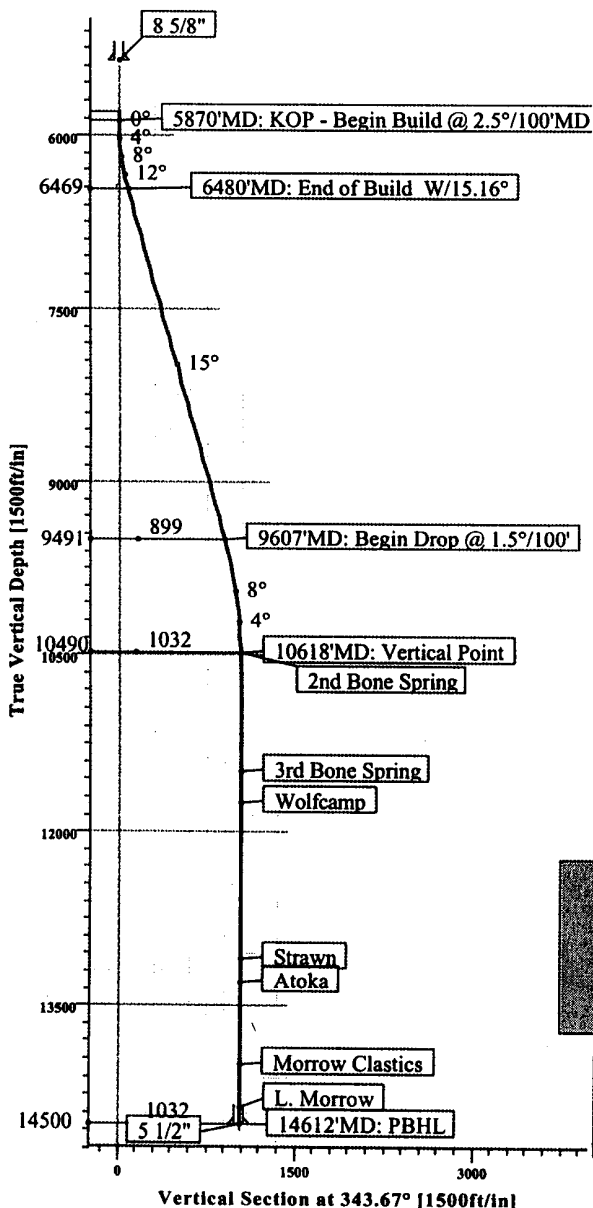
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	13	21-S	32-E		1980'	SOUTH	660'	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order 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

GEODETIC COORDINATES NAD 27 NME SURF. Y=536950.2 N X=715869.2 E LAT.=32°28'27.27" N LONG.=103°38'00.06" W B.H. Y=537936.9 N X=715573.2 E 660' 1980' 3905.0' 3904.8' 600' 950' 3906.8' 3908.8' 600' 990'	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <u>George R. Smith</u> Signature George R. Smith, agent for Printed Name Samson Resources Title Sept. 2, 2004 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 supervision, and that the same is true and correct to the best of my belief. JUNE 4, 2004 Date Surveyed: 08/19/04 JR Signature & Seal of Professional Surveyor GARY E. EDSON NEW MEXICO 04.15.1081 Certificate No. GARY EDSON 12641
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ANNOUATIONS		
No.	T.M.	Remarks
1041	13170.00	13170.00
1042	13175.00	13175.00
1043	13180.00	13180.00
1044	13185.00	13185.00
1045	13190.00	13190.00
1046	13195.00	13195.00
1047	13200.00	13200.00
1048	13205.00	13205.00
1049	13210.00	13210.00
1050	13215.00	13215.00
1051	13220.00	13220.00
1052	13225.00	13225.00
1053	13230.00	13230.00
1054	13235.00	13235.00
1055	13240.00	13240.00
1056	13245.00	13245.00
1057	13250.00	13250.00
1058	13255.00	13255.00
1059	13260.00	13260.00
1060	13265.00	13265.00
1061	13270.00	13270.00
1062	13275.00	13275.00
1063	13280.00	13280.00
1064	13285.00	13285.00
1065	13290.00	13290.00
1066	13295.00	13295.00
1067	13300.00	13300.00
1068	13305.00	13305.00
1069	13310.00	13310.00
1070	13315.00	13315.00
1071	13320.00	13320.00
1072	13325.00	13325.00
1073	13330.00	13330.00
1074	13335.00	13335.00
1075	13340.00	13340.00
1076	13345.00	13345.00
1077	13350.00	13350.00
1078	13355.00	13355.00
1079	13360.00	13360.00
1080	13365.00	13365.00
1081	13370.00	13370.00
1082	13375.00	13375.00
1083	13380.00	13380.00
1084	13385.00	13385.00
1085	13390.00	13390.00
1086	13395.00	13395.00
1087	13400.00	13400.00
1088	13405.00	13405.00
1089	13410.00	13410.00
1090	13415.00	13415.00
1091	13420.00	13420.00
1092	13425.00	13425.00
1093	13430.00	13430.00
1094	13435.00	13435.00
1095	13440.00	13440.00
1096	13445.00	13445.00
1097	13450.00	13450.00
1098	13455.00	13455.00
1099	13460.00	13460.00
1100	13465.00	13465.00
1101	13470.00	13470.00
1102	13475.00	13475.00
1103	13480.00	13480.00
1104	13485.00	13485.00
1105	13490.00	13490.00
1106	13495.00	13495.00
1107	13500.00	13500.00
1108	13505.00	13505.00
1109	13510.00	13510.00
1110	13515.00	13515.00
1111	13520.00	13520.00
1112	13525.00	13525.00
1113	13530.00	13530.00
1114	13535.00	13535.00
1115	13540.00	13540.00
1116	13545.00	13545.00
1117	13550.00	13550.00
1118	13555.00	13555.00
1119	13560.00	13560.00
1120	13565.00	13565.00
1121	13570.00	13570.00
1122	13575.00	13575.00
1123	13580.00	13580.00
1124	13585.00	13585.00
1125	13590.00	13590.00
1126	13595.00	13595.00
1127	13600.00	13600.00
1128	13605.00	13605.00
1129	13610.00	13610.00
1130	13615.00	



SECTION DETAILS										
	MP	TP	AC	TP		MP	TP	AC	TP	
1	1000.00	11.00	22.00	1100.00	1	1000.00	0.50	0.00	0.00	1
2	1030.00	11.00	22.00	1100.00	2	1030.00	0.50	0.00	0.00	2
3	1060.00	11.00	22.00	1100.00	3	1060.00	0.50	0.00	0.00	3
4	1090.00	11.00	22.00	1100.00	4	1090.00	0.50	0.00	0.00	4
5	1120.00	11.00	22.00	1100.00	5	1120.00	0.50	0.00	0.00	5
6	1150.00	11.00	22.00	1100.00	6	1150.00	0.50	0.00	0.00	6
7	1180.00	11.00	22.00	1100.00	7	1180.00	0.50	0.00	0.00	7
8	1210.00	11.00	22.00	1100.00	8	1210.00	0.50	0.00	0.00	8
9	1240.00	11.00	22.00	1100.00	9	1240.00	0.50	0.00	0.00	9
10	1270.00	11.00	22.00	1100.00	10	1270.00	0.50	0.00	0.00	10
11	1300.00	11.00	22.00	1100.00	11	1300.00	0.50	0.00	0.00	11
12	1330.00	11.00	22.00	1100.00	12	1330.00	0.50	0.00	0.00	12
13	1360.00	11.00	22.00	1100.00	13	1360.00	0.50	0.00	0.00	13
14	1390.00	11.00	22.00	1100.00	14	1390.00	0.50	0.00	0.00	14
15	1420.00	11.00	22.00	1100.00	15	1420.00	0.50	0.00	0.00	15
16	1450.00	11.00	22.00	1100.00	16	1450.00	0.50	0.00	0.00	16
17	1480.00	11.00	22.00	1100.00	17	1480.00	0.50	0.00	0.00	17
18	1510.00	11.00	22.00	1100.00	18	1510.00	0.50	0.00	0.00	18
19	1540.00	11.00	22.00	1100.00	19	1540.00	0.50	0.00	0.00	19
20	1570.00	11.00	22.00	1100.00	20	1570.00	0.50	0.00	0.00	20
21	1600.00	11.00	22.00	1100.00	21	1600.00	0.50	0.00	0.00	21
22	1630.00	11.00	22.00	1100.00	22	1630.00	0.50	0.00	0.00	22
23	1660.00	11.00	22.00	1100.00	23	1660.00	0.50	0.00	0.00	23
24	1690.00	11.00	22.00	1100.00	24	1690.00	0.50	0.00	0.00	24
25	1720.00	11.00	22.00	1100.00	25	1720.00	0.50	0.00	0.00	25
26	1750.00	11.00	22.00	1100.00	26	1750.00	0.50	0.00	0.00	26
27	1780.00	11.00	22.00	1100.00	27	1780.00	0.50	0.00	0.00	27
28	1810.00	11.00	22.00	1100.00	28	1810.00	0.50	0.00	0.00	28
29	1840.00	11.00	22.00	1100.00	29	1840.00	0.50	0.00	0.00	29
30	1870.00	11.00	22.00	1100.00	30	1870.00	0.50	0.00	0.00	30
31	1900.00	11.00	22.00	1100.00	31	1900.00	0.50	0.00	0.00	31
32	1930.00	11.00	22.00	1100.00	32	1930.00	0.50	0.00	0.00	32
33	1960.00	11.00	22.00	1100.00	33	1960.00	0.50	0.00	0.00	33
34	1990.00	11.00	22.00	1100.00	34	1990.00	0.50	0.00	0.00	34
35	2020.00	11.00	22.00	1100.00	35	2020.00	0.50	0.00	0.00	35
36	2050.00	11.00	22.00	1100.00	36	2050.00	0.50	0.00	0.00	36
37	2080.00	11.00	22.00	1100.00	37	2080.00	0.50	0.00	0.00	37
38	2110.00	11.00	22.00	1100.00	38	2110.00	0.50	0.00	0.00	38
39	2140.00	11.00	22.00	1100.00	39	2140.00	0.50	0.00	0.00	39
40	2170.00	11.00	22.00	1100.00	40	2170.00	0.50	0.00	0.00	40
41	2200.00	11.00	22.00	1100.00	41	2200.00	0.50	0.00	0.00	41
42	2230.00	11.00	22.00	1100.00	42	2230.00	0.50	0.00	0.00	42
43	2260.00	11.00	22.00	1100.00	43	2260.00	0.50	0.00	0.00	43
44	2290.00	11.00	22.00	1100.00	44	2290.00	0.50	0.00	0.00	44
45	2320.00	11.00	22.00	1100.00	45	2320.00	0.50	0.00	0.00	45
46	2350.00	11.00	22.00	1100.00	46	2350.00	0.50	0.00	0.00	46
47	2380.00	11.00	22.00	1100.00	47	2380.00	0.50	0.00	0.00	47
48	2410.00	11.00	22.00	1100.00	48	2410.00	0.50	0.00	0.00	48
49	2440.00	11.00	22.00	1100.00	49	2440.00	0.50	0.00	0.00	49
50	2470.00	11.00	22.00	1100.00	50	2470.00	0.50	0.00	0.00	50
51	2500.00	11.00	22.00	1100.00	51	2500.00	0.50	0.00	0.00	51
52	2530.00	11.00	22.00	1100.00	52	2530.00	0.50	0.00	0.00	52
53	2560.00	11.00	22.00	1100.00	53	2560.00	0.50	0.00	0.00	53
54	2590.00	11.00	22.00	1100.00	54	2590.00	0.50	0.00	0.00	54
55	2620.00	11.00	22.00	1100.00	55	2620.00	0.50	0.00	0.00	55
56	2650.00	11.00	22.00	1100.00	56	2650.00	0.50	0.00	0.00	56
57	2680.00	11.00	22.00	1100.00	57	2680.00	0.50	0.00	0.00	57
58	2710.00	11.00	22.00	1100.00	58	2710.00	0.50	0.00	0.00	58
59	2740.00	11.00	22.00	1100.00	59	2740.00	0.50	0.00	0.00	59
60	2770.00	11.00	22.00	1100.00	60	2770.00	0.50	0.00	0.00	60
61	2800.00	11.00	22.00	1100.00	61	2800.00	0.50	0.00	0.00	61
62	2830.00	11.00	22.00	1100.00	62	2830.00	0.50	0.00	0.00	62
63	2860.00	11.00	22.00	1100.00	63	2860.00	0.50	0.00	0.00	63
64	2890.00	11.00	22.00	1100.00	64	2890.00	0.50	0.00	0.00	64
65	2920.00	11.00	22.00	1100.00	65	2920.00	0.50	0.00	0.00	65
66	2950.00	11.00	22.00	1100.00	66	2950.00	0.50	0.00	0.00	66
67	2980.00	11.00	22.00	1100.00	67	2980.00	0.50	0.00	0.00	67
68	3010.00	11.00	22.00	1100.00	68	3010.00	0.50	0.00	0.00	68
69	3040.00	11.00	22.00	1100.00	69	3040.00	0.50	0.00	0.00	69
70	3070.00	11.00	22.00	1100.00	70	3070.00	0.50	0.00	0.00	70
71	3100.00	11.00	22.00	1100.00	71	3100.00	0.50	0.00	0.00	71
72	3130.00	11.00	22.00	1100.00	72	3130.00	0.50	0.00	0.00	72
73	3160.00	11.00	22.00	1100.00	73	3160.00	0.50	0.00	0.00	73
74	3190.00	11.00	22.00	1100.00	74	3190.00	0.50	0.00	0.00	74
75	3220.00	11.00	22.00	1100.00	75	3220.00	0.50	0.00	0.00	75
76	3250.00	11.00	22.00	1100.00	76	3250.00	0.50	0.00	0.00	76
77	3280.00	11.00	22.00	1100.00	77	3280.00	0.50	0.00	0.00	77
78	3310.00	11.00	22.00	1100.00	78	3310.00	0.50	0.00	0.00	78
79	3340.00	11.00	22.00	1100.00	79	3340.00	0.50	0.00	0.00	79
80	3370.00	11.00	22.00	1100.00	80	3370.00	0.50	0.00	0.00	80
81	3400.00	11.00	22.00	1100.00	81	3400.00	0.50	0.00	0.00	81
82	3430.00	11.00	22.00	1100.00	82	3430.00	0.50	0.00	0.00	82
83	3460.00	11.00	22.00	1100.00	83	3460.00	0.50	0.00	0.00	83
84	3490.00	11.00	22.00	1100.00	84	3490.00	0.50	0.00	0.00	84
85	3520.00	11.00	22.00	1100.00	85	3520.00	0.50	0.00	0.00	85
86	3550.00	11.00	22.00	1100.00	86	3550.00	0.50	0.00	0.00	86
87	3580.00	11.00	22.00	1100.00	87	3580.00	0.50	0.00	0.00	87
88	3610.00	11.00	22.00	1100.00	88	3610.00	0.50	0.00	0.00	88
89	3640.00	11.00	22.00	1100.00	89	3640.00	0.50	0.00	0.00	89
90	3670.00	11.00	22.00	1100.00	90	3670.00	0.50	0.00	0.00	90
91	3700.00	11.00	22.00	1100.00	91	3700.00	0.50	0.00	0.00	91
92	3730.00	11.00	22.00	1100.00	92	3730.00	0.50	0.00	0.00	92
93	3760.00	11.00	22.00	1100.00	93	3760.00	0.50	0.00	0.00	93
94	3790.00	11.00	22.00	1100.00	94	3790.00	0.50	0.00	0.00	94
95	3820.00	11.00	22.00	1100.00	95	3820.00	0.50	0.00	0.00	95
96	3850.00	11.00	22.00	1100.00	96	3850.00	0.50	0.00	0.00	96
97	3880.00	11.00	22.00	1100.00	97	3880.00	0.50	0.00	0.00	97
98	3910.00	11.00	22.00	1100.00	98	3910.00	0.50	0.00	0.00	98
99	3940.00	11.00	22.00	1100.00	99	3940.00	0.50	0.00	0.00	99
100	3970.00	11.00	22.00	1100.00	100	3970.00	0.50	0.00	0.00	100

TARGET DETAILS							
ID	Name	TYD	NAS	SEW	Northing	Easting	Shape
	PSHL	1490.00	990.00	230.00	990.00	230.00	Point



LEAM Drilling Systems, Inc.

Well Planning Report

Company: SAMSON **Date:** 8/17/2004 **Time:** 08:54:36 **Page:** 1
Field: Lea County, New Mexico **Co-ordinate(NE) Reference:** Site: Q4113, Grid North
Site: Q4113 **Vertical (TVD) Reference:** SITE 0.0
Well: Derby 13 Federal Com #1 **Section (VS) Reference:** Well (0.00N,0.00E,343.67Azi)
Wellpath: Planning **Survey Calculation Method:** Minimum Curvature **Db:** Sybase

Field: Lea County, New Mexico

Map System: US State Plane Coordinate System 1927
Geo Datum: NAD27 (Clarke 1866)
Sys Datum: Mean Sea Level

Map Zone: New Mexico, Eastern Zone
Coordinate System: Site Centre
Geomagnetic Model: igrf2000

Site: Q4113

Site Position: Northing: 0.00 ft Latitude: 30 59 24.512 N
From: Map Easting: 0.00 ft Longitude: 105 55 44.137 W
Position Uncertainty: 0.00 ft North Reference: Grid
Ground Level: 0.00 ft Grid Convergence: -0.82 deg

Well: Derby 13 Federal Com #1 **Slot Name:**
 Section 13: T21S - R32E
Well Position: +N/-S 0.00 ft Northing: 0.00 ft Latitude: 30 59 24.512 N
 +E/-W 0.00 ft Easting: 0.00 ft Longitude: 105 55 44.137 W
Position Uncertainty: 0.00 ft

Wellpath: Planning **Drilled From:** Surface
Current Datum: SITE **Tie-on Depth:** 0.00 ft
Magnetic Data: 8/4/2004 **Above System Datum:** Mean Sea Level
Field Strength: 48405 nT **Declination:** 9.49 deg
Vertical Section: Depth From (TVD) +N/-S **Mag Dip Angle:** 58.78 deg
 ft ft ft deg
 0.00 0.00 0.00 343.67

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
5800.00	0.00	327.94	5800.00	0.00	0.00	0.00	0.00	0.00	0.00	
5870.00	0.00	327.94	5870.00	0.00	0.00	0.00	0.00	0.00	327.94	
6476.54	15.16	343.67	6469.48	76.58	-22.43	2.50	2.50	0.00	0.00	
9606.91	15.16	343.67	9490.87	862.37	-252.61	0.00	0.00	0.00	0.00	
10617.80	0.00	0.00	10490.00	990.00	-290.00	1.50	-1.50	0.00	180.00	
14627.80	0.00	0.00	14500.00	990.00	-290.00	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
5350.00	0.00	327.94	5350.00	0.00	0.00	0.00	0.00	0.00	0.00	8 5/8"
5800.00	0.00	327.94	5800.00	0.00	0.00	0.00	0.00	0.00	0.00	
5870.00	0.00	327.94	5870.00	0.00	0.00	0.00	0.00	0.00	0.00	
5873.29	0.08	343.67	5873.29	0.00	0.00	0.00	2.50	2.50	0.00	5873'MD: End of Buil
5900.00	0.75	343.67	5900.00	0.19	-0.06	0.20	2.50	2.50	0.00	
6000.00	3.25	343.67	5999.93	3.54	-1.04	3.69	2.50	2.50	0.00	
6100.00	5.75	343.67	6099.61	11.07	-3.24	11.53	2.50	2.50	0.00	
6200.00	8.25	343.67	6198.86	22.76	-6.67	23.72	2.50	2.50	0.00	
6300.00	10.75	343.67	6297.48	38.60	-11.31	40.22	2.50	2.50	0.00	
6400.00	13.25	343.67	6395.29	58.55	-17.15	61.01	2.50	2.50	0.00	
6476.54	15.16	343.67	6469.48	76.58	-22.43	79.79	2.50	2.50	0.00	
6500.00	15.16	343.67	6492.13	82.47	-24.16	85.93	0.00	0.00	0.00	
6600.00	15.16	343.67	6588.65	107.57	-31.51	112.09	0.00	0.00	0.00	
6700.00	15.16	343.67	6685.16	132.67	-38.86	138.24	0.00	0.00	0.00	
6800.00	15.16	343.67	6781.68	157.77	-46.22	164.40	0.00	0.00	0.00	
6900.00	15.16	343.67	6878.20	182.87	-53.57	190.56	0.00	0.00	0.00	
7000.00	15.16	343.67	6974.72	207.98	-60.92	216.72	0.00	0.00	0.00	
7100.00	15.16	343.67	7071.24	233.08	-68.28	242.87	0.00	0.00	0.00	
7200.00	15.16	343.67	7167.76	258.18	-75.63	269.03	0.00	0.00	0.00	



LEAM Drilling Systems, Inc.

Well Planning Report

Company: SAMSON	Date: 8/17/2004	Time: 08:54:36	Page: 2
Field: Lea County, New Mexico	Co-ordinate(NE) Reference: Site: Q4113, Grid North		
Site: Q4113	Vertical (TVD) Reference: SITE 0.0		
Well: Derby 13 Federal Com #1	Section (VS) Reference: Well (0.00N,0.00E,343.67Azi)		
Wellpath: Planning	Survey Calculation Method: Minimum Curvature		
			Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
7300.00	15.16	343.67	7264.27	283.28	-82.98	295.19	0.00	0.00	0.00	
7400.00	15.16	343.67	7360.79	308.39	-90.34	321.35	0.00	0.00	0.00	
7500.00	15.16	343.67	7457.31	333.49	-97.69	347.50	0.00	0.00	0.00	
7600.00	15.16	343.67	7553.83	358.59	-105.04	373.66	0.00	0.00	0.00	
7700.00	15.16	343.67	7650.35	383.69	-112.40	399.82	0.00	0.00	0.00	
7800.00	15.16	343.67	7746.87	408.80	-119.75	425.97	0.00	0.00	0.00	
7900.00	15.16	343.67	7843.38	433.90	-127.10	452.13	0.00	0.00	0.00	
8000.00	15.16	343.67	7939.90	459.00	-134.46	478.29	0.00	0.00	0.00	
8100.00	15.16	343.67	8036.42	484.10	-141.81	504.45	0.00	0.00	0.00	
8200.00	15.16	343.67	8132.94	509.21	-149.16	530.60	0.00	0.00	0.00	
8300.00	15.16	343.67	8229.46	534.31	-156.51	556.76	0.00	0.00	0.00	
8400.00	15.16	343.67	8325.98	559.41	-163.87	582.92	0.00	0.00	0.00	
8500.00	15.16	343.67	8422.50	584.51	-171.22	609.08	0.00	0.00	0.00	
8600.00	15.16	343.67	8519.01	609.62	-178.57	635.23	0.00	0.00	0.00	
8700.00	15.16	343.67	8615.53	634.72	-185.93	661.39	0.00	0.00	0.00	
8800.00	15.16	343.67	8712.05	659.82	-193.28	687.55	0.00	0.00	0.00	
8900.00	15.16	343.67	8808.57	684.92	-200.63	713.70	0.00	0.00	0.00	
9000.00	15.16	343.67	8905.09	710.03	-207.99	739.86	0.00	0.00	0.00	
9100.00	15.16	343.67	9001.61	735.13	-215.34	766.02	0.00	0.00	0.00	
9200.00	15.16	343.67	9098.12	760.23	-222.69	792.18	0.00	0.00	0.00	
9300.00	15.16	343.67	9194.64	785.33	-230.05	818.33	0.00	0.00	0.00	
9400.00	15.16	343.67	9291.16	810.44	-237.40	844.49	0.00	0.00	0.00	
9500.00	15.16	343.67	9387.68	835.54	-244.75	870.65	0.00	0.00	0.00	
9606.91	15.16	343.67	9490.87	862.37	-252.61	898.61	0.00	0.00	0.00	
9700.00	13.77	343.67	9581.00	884.69	-259.15	921.87	1.50	-1.50	0.00	
9730.03	13.32	343.67	9610.20	891.44	-261.13	928.90	1.50	-1.50	0.00	9730'MD: Begin Drop
9800.00	12.27	343.67	9678.43	906.30	-265.48	944.39	1.50	-1.50	0.00	
9900.00	10.77	343.67	9776.41	925.47	-271.10	964.35	1.50	-1.50	0.00	
10000.00	9.27	343.67	9874.89	942.16	-275.99	981.75	1.50	-1.50	0.00	
10100.00	7.77	343.67	9973.78	956.37	-280.15	996.56	1.50	-1.50	0.00	
10200.00	6.27	343.67	10073.03	968.09	-283.58	1008.77	1.50	-1.50	0.00	
10300.00	4.77	343.67	10172.56	977.32	-286.29	1018.39	1.50	-1.50	0.00	
10400.00	3.27	343.67	10272.32	984.04	-288.25	1025.39	1.50	-1.50	0.00	
10500.00	1.77	343.67	10372.22	988.26	-289.49	1029.78	1.50	-1.50	0.00	
10600.00	0.27	343.67	10472.20	989.96	-289.99	1031.56	1.50	-1.50	0.00	
10602.19	0.23	343.67	10474.39	989.97	-289.99	1031.57	1.50	-1.50	0.00	10602'MD: Vertical P
10617.80	0.00	0.00	10490.00	990.00	-290.00	1031.60	1.50	-1.50	0.00	2nd Bone Spring
10700.00	0.00	0.00	10572.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
10800.00	0.00	0.00	10672.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
10900.00	0.00	0.00	10772.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11000.00	0.00	0.00	10872.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11100.00	0.00	0.00	10972.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11200.00	0.00	0.00	11072.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11300.00	0.00	0.00	11172.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11400.00	0.00	0.00	11272.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11500.00	0.00	0.00	11372.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11600.00	0.00	0.00	11472.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11609.80	0.00	0.00	11482.00	990.00	-290.00	1031.60	0.00	0.00	0.00	3rd Bone Spring
11700.00	0.00	0.00	11572.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11800.00	0.00	0.00	11672.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
11882.80	0.00	0.00	11755.00	990.00	-290.00	1031.60	0.00	0.00	0.00	Wolfcamp
11900.00	0.00	0.00	11772.20	990.00	-290.00	1031.60	0.00	0.00	0.00	



LEAM Drilling Systems, Inc.

Well Planning Report

Company: SAMSON
Field: Lea County, New Mexico
Site: Q4113
Well: Derby 13 Federal Com #1
Wellpath: Planning

Date: 8/17/2004 Time: 08:54:36 Page: 3
Co-ordinate(NE) Reference: Site: Q4113, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,343.67Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Comment
12000.00	0.00	0.00	11872.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
12100.00	0.00	0.00	11972.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
12200.00	0.00	0.00	12072.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
12300.00	0.00	0.00	12172.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
12400.00	0.00	0.00	12272.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
12500.00	0.00	0.00	12372.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
12600.00	0.00	0.00	12472.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
12700.00	0.00	0.00	12572.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
12800.00	0.00	0.00	12672.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
12900.00	0.00	0.00	12772.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13000.00	0.00	0.00	12872.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13100.00	0.00	0.00	12972.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13200.00	0.00	0.00	13072.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13222.80	0.00	0.00	13095.00	990.00	-290.00	1031.60	0.00	0.00	0.00	Strawn
13300.00	0.00	0.00	13172.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13400.00	0.00	0.00	13272.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13417.80	0.00	0.00	13290.00	990.00	-290.00	1031.60	0.00	0.00	0.00	Atoka
13500.00	0.00	0.00	13372.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13600.00	0.00	0.00	13472.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13700.00	0.00	0.00	13572.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13800.00	0.00	0.00	13672.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
13900.00	0.00	0.00	13772.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
14000.00	0.00	0.00	13872.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
14100.00	0.00	0.00	13972.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
14127.80	0.00	0.00	14000.00	990.00	-290.00	1031.60	0.00	0.00	0.00	Morrow Clastics
14200.00	0.00	0.00	14072.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
14300.00	0.00	0.00	14172.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
14400.00	0.00	0.00	14272.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
14477.80	0.00	0.00	14350.00	990.00	-290.00	1031.60	0.00	0.00	0.00	L. Morrow
14500.00	0.00	0.00	14372.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
14600.00	0.00	0.00	14472.20	990.00	-290.00	1031.60	0.00	0.00	0.00	
14627.80	0.00	0.00	14500.00	990.00	-290.00	1031.60	0.00	0.00	0.00	PBHL

Annotation

MD ft	TVD ft	
5350.00	5350.00	5350'MD: KOP - Begin Build @ 2.5"/100'MD
5873.29	5873.29	5873'MD: End of Build @ 2.5"/100'
9730.03	9610.20	9730'MD: Begin Drop @ 1.5"/100'
10602.19	10474.39	10602'MD: Vertical Point
10617.80	10490.00	2nd Bone Spring
11609.80	11482.00	3rd Bone Spring
11882.80	11755.00	Wolfcamp
13222.80	13095.00	Strawn
13417.80	13290.00	Atoka
14127.80	14000.00	Morrow Clastics
14477.80	14350.00	L. Morrow
14627.80	14500.00	14612'MD: PBHL

Casing Points

MD ft	TVD ft	Diameter in	Hole Size in	Name
1600.00	1600.00	0.000	18.500	16"
3200.00	3200.00	0.000	14.750	11 3/4"
5350.00	5350.00	0.000	10.675	8 5/8"
14627.80	14500.00	5.500	7.850	5 1/2"



Date: 8/17/2004 Time: 08:54:36 Page: 4
Co-ordinate(NE) Reference: Site: Q4113, Grid North
Vertical (TVD) Reference: SITE 0.0
Section (VS) Reference: Well (0.00N,0.00E,343.67Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Name	Description	Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	<--- Latitude ---> Deg Min Sec	<--- Longitude ---> Deg Min Sec
PBHL -Plan hit target			14500.00	990.00	-290.00	990.00	-290.00	30 59 34.266 N	105 55 47.631 W

APPLICATION FOR DRILLING

SAMSON RESOURCES

Derby 13 Federal Com., Well No.1

Surface location: 990' FSL & 950' FWL, Sec. 13-T21S-R32E

Bottom hole location: 1980' FSL & 660' FWL, Sec. 13-T21S-R32E

Lea County, New Mexico

Lease No.: NM-14155

(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	1,630'	3 rd Sand	10,485'
Yates	3,395'	Wolfcamp	11,755'
Capitan	3,725'	Strawn	13,095'
Cherry Canyon	5,770'	Atoka	13,290'
Brushy Canyon	7,055'	Morrow Clastics	14,000'
Bone Spring	8,935'	Lower Morrow	14,350'
1 st Sand	9,895'	T.D.	14,500'
2 nd Sand	10,490'		

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 5700'.

Gas: Possible in Atoka below 13,290' and the Morrow below 14,000'.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
18 1/2"	16"	75.0#	K-55	BT&C	0' - 1,655'	Circ. 1100 sx "C" cement to surace
14 3/4"	11 3/4"	54.5#	K-55	BT&C	0' - 3,400'	Circ. 1120 sx. HLC Prem Plus
10 5/8"	8 5/8"	32.0#	HCK55	BT&C	0' - 5,745'	Circ. 1100 sx. Interfill C & Prem
7 7/8"	5 1/2"	20.0#	P110	LT&C	0' - 14,500'	1035 sx Zoneseal & 315 sx Super H TOC 5545' - 5200'

5. Minimum Specifications for Pressure Control Equipment:

An NU 20" 2M WP annular preventer and test to 800 psi before drilling 14 3/4" hole.

A 13 5/8" 10M WP Shaffer, double over single w/ 13 5/8" 5M Hydril annular preventer BOP will be installed on the 11 3/4" casing. Perform 3M test before drilling the 10 5/8" hole and 5M test before drilling 7 7/8" hole. See Exhibit "E".

6. MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 1,660': Fresh water mud:	8.4 - 9.2 ppg	28 - 29	No W/L control
1,660' - 3,400': Brine mud	10.0 - 10.4 ppg	26 - 29	No W/L control
3,400' - 5,770': FW + additions	8.8 - 9.6 ppg	26 - 29	No W/L control
5,770' - 12,500': Fresh water/Cut brine	8.4 - 9.2 ppg	26 - 29	No W/L control
12,500' - 14,500': 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

Derby 13 Federal Com., Well No.1

Page 2

8. Testing, Logging, and Coring Program:

Drill Stem Tests: None unless conditions warrant.

Logging: 5,770' to T.D: CNL-DNL w/GR-Cal.

5,770' 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 = 6380 psi and surface pressure of 3190 psi with a temperature of 205°.

10. H₂S: None expected. None in existing wells in close vicinity, but the Mud Log Unit will be cautioned to use a gas trap to detect H₂S and if any is detected the mud weight will be increased along with H₂S inhibitors sufficient to control the gas.

11. Anticipated starting date: February 14 2005.

Anticipated completion of drilling operations: Approximately 6 weeks.

MULTI POINT SURFACE USE AND OPERATIONS PLAN

SAMSON RESOURCES

Derby 13 Federal Com., Well No.1

Surface location: 990' FSL & 950' FWL, Sec. 13-R21S-R32E

Bottom hole location: 1980' FSL & 660' FWL, Sec. 13-R21S-R32E

Lea County, New Mexico

Lease No.: NM-14155

(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 37.5 miles of paved highway and 3.6 miles of gravel ranch/oilfield roads.
- B. Directions: Travel east from Carlsbad, NM on U.S. Highway 62/180 for approximately 32 miles to NM Highway #176. Turn southeast on NM #176 for 5.3 miles, .4 mile east of MM#6. Turn south on oil field road at a SE New Mexico Operating Unit, Hat Mesa Bootleg compressor station sign, onto a good gravel road. Continue south for 2.5 miles to a caliche pit on the east (right) side of the road. Turn southeast just past the caliche pit for 1.1 miles to well site on the right and a Duke Pipeline and access road. The start of the proposed access road at this point on the east side of road and will follow the two track pipeline road for 2600' to the southwest corner of the pad. The road will be on the south side of the pipeline and will cross the pipeline at the southwest corner of the proposed well site.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The existing Duke Energy pipeline access road will be upgraded for approximately 2600 feet in length and is color coded red on Exhibit "A".
- B. Construction: The existing access road will be constructed by grading and topping with compacted caliche and will be properly drained.
- C. Turnouts: There will be at least two turnouts, increasing the road width to 20 feet for passing.
- D. Culverts: None required.
- E. Cuts and Fills: None required except the leveling of small dunes and deflation basins.
- F. Gates, Cattle guards: None required.
- G. Off Lease R/W: None required.

3. LOCATION OF EXISTING WELLS:

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

4. 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. A 3" steel 3200 psi gas flow line, with maximum of 1000 psi operating pressures, will be buried and will run parallel to the access road back to the Duke gas pipeline near the location..

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 and proposed 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 an approved Federal pit in the SENE Sec. 11-T21S-R32E. 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.
- B. Mat Size: 340' X 225', plus 175' x 175' mud pits on the north.
- C. Cut & Fill: There will be a .5-foot cut on the south and west with fill to the north and east.
- D. The surface will be topped with compacted caliche and the mud pits will be plastic lined.

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 abandonment.

11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road is located on the Hat Mesa butte. The location on top of the butte is quite level, however, the slope on the southwest side is 7% and 9% on the northeast slope from a location elevation of 3908'.
- B. Soil: The topsoil on the well site and access road is a dark brown colored fine sand with caliche scatter. The soil is of the Pyote and Maljamar Fine Sands and some Mobeetie-Potter Soils Series.
- C. Flora and Fauna: The vegetation at the well site is a sparse to fair grass cover of threeawn, dropseed, burrograss, bluestem and other miscellaneous native grasses along with plants of mesquite, yucca, sage, broomweed, cacti, shinnery oak brush 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 are conducting an archaeological survey and their report will be submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

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

Todd Wiley
Samson Resources
Samson Plaza-Two West Second St.
Tulsa, OK 74103-3103
Office Phone: (918) 591-1531

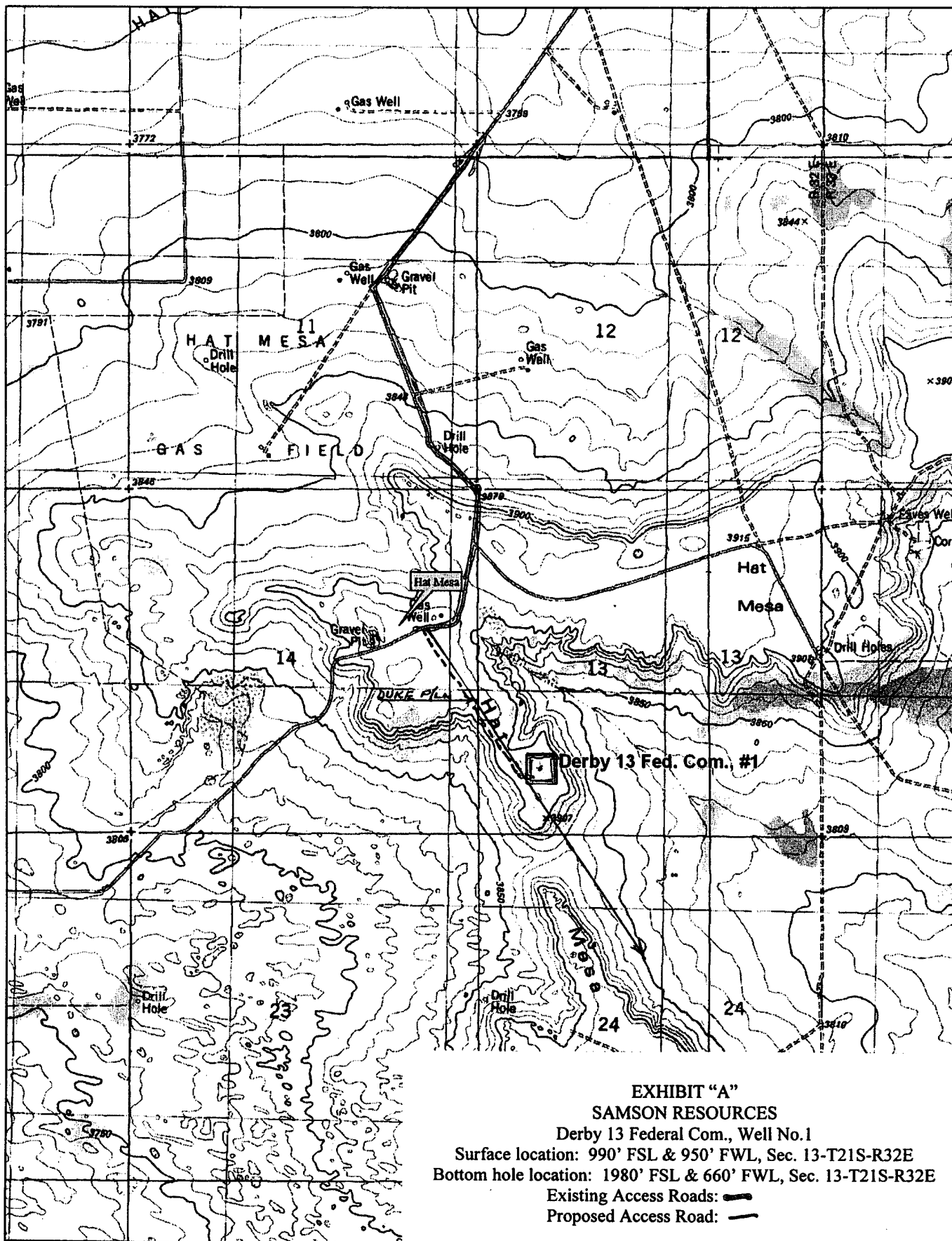
13. CERTIFICATION:

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 2, 2004



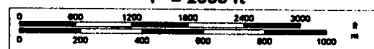
George R. Smith
Agent for: Samson Resources



DELORME

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 www.delorme.com

Scale 1 : 24,000
 1" = 2000 ft



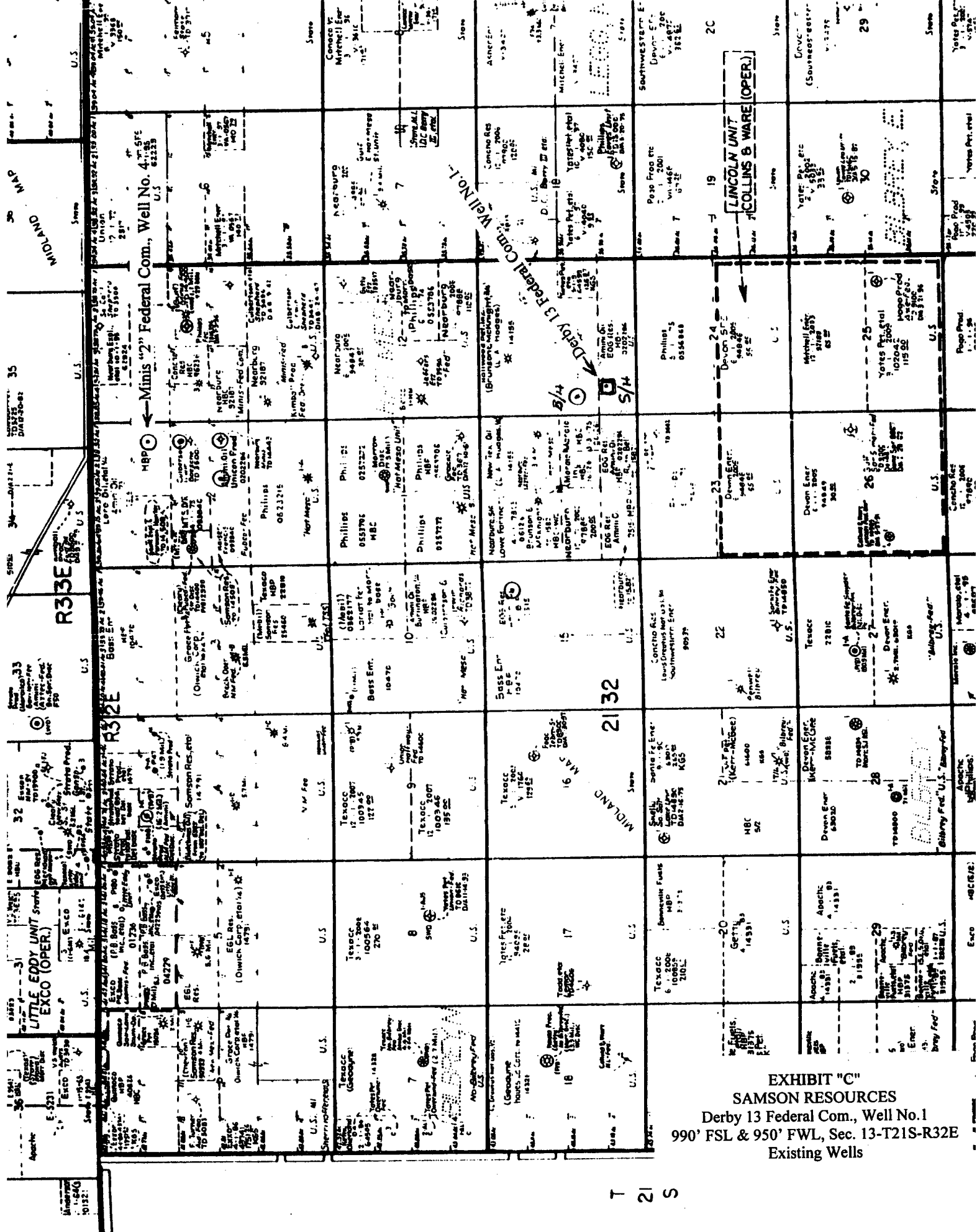
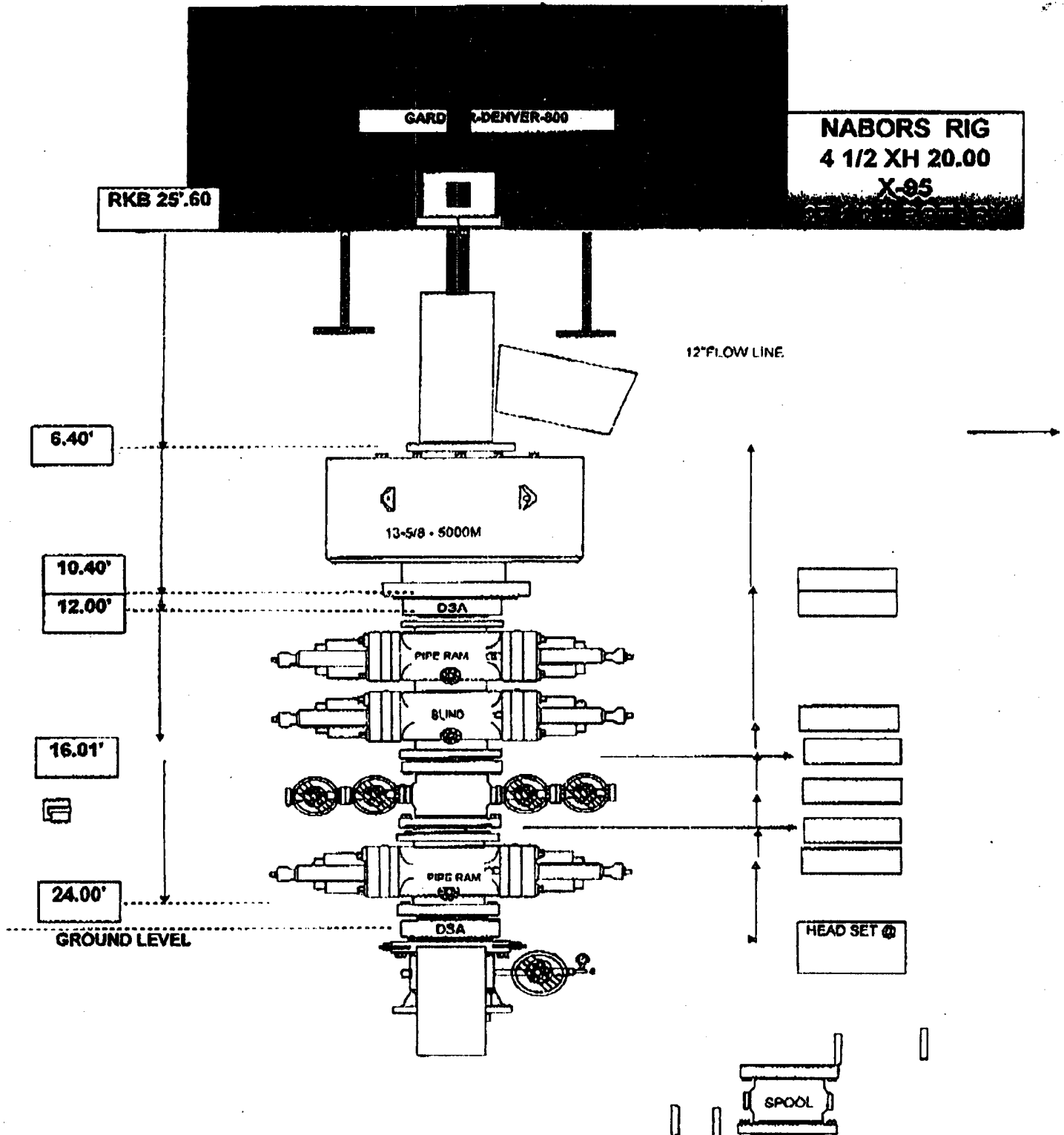


EXHIBIT "C"
SAMSON RESOURCES
Derby 13 Federal Com., Well No. 1
990' FSL & 950' FWL, Sec. 13-T21S-R32E
Existing Wells

T 21 S



ANNULAR	= 13 5/8 - 5M HYDRIL GK ANN
DOUBLE	= 13 5/8 - 10M SHAFFER SL (DBL) BOP
SINGLE	= 13 5/8 - 10M SHAFFER SL POSLOK BOP
WELL HEAD	= 11" 5M
KILL LINE VALVES	= 2 1/16 10M
CHOKE LINE VALVE	= 4 1/16 10M

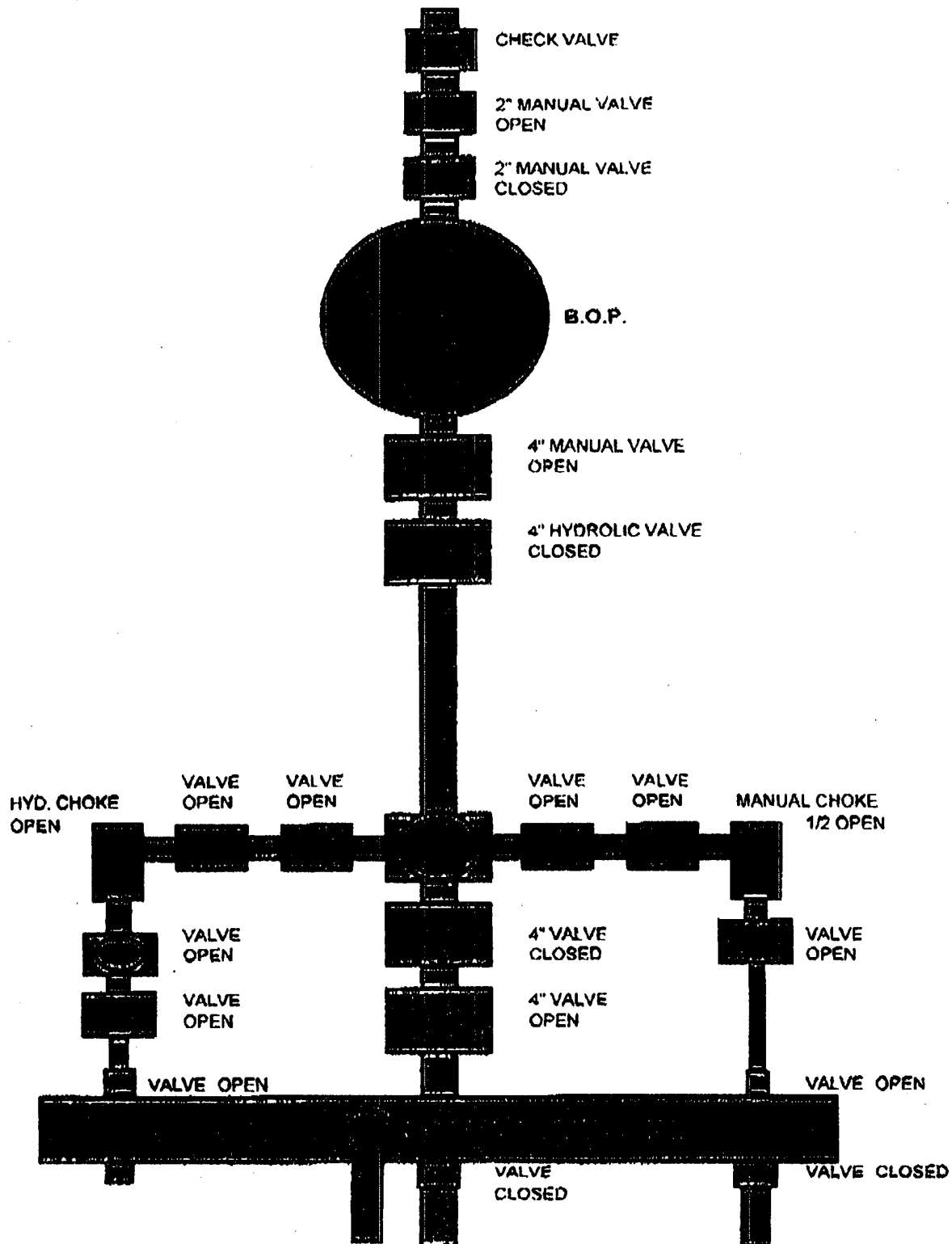
EXHIBIT "E"
SAMSON RESOURCES
Derby 13 Federal Com., Well No.1
BOP Specifications

Rig 329

N.D.U.S.A.

MANIFOLD SETUP

NUEVO ENERGY



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
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: SAMSON RESOURCES CO Telephone: 918/591-1386 e-mail address: TKOSCELNY@SAMSON.COM		
Address: TWO WEST SECOND ST., TULSA, OK 74103-3103		
Facility or well name: DERBY "13" FEDERAL Well #: 30-025-37056 U/L or Qtr/Qu: SW Sec 13 T 21S R 32E		
County: LEA Latitude 32 28 27.27 Longitude 103 38 00.06 NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐		
Pit Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume 32,000 bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not: _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet	(20 points)
	50 feet or more, but less than 100 feet	(10 points)
	100 feet or more	(0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes	(20 points)
	No	(0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet	(20 points)
	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more	(0 points)
Ranking Score (Total Points)		10

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 ☐ 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 ☐ Yes ☐ 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.

I 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 ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: **8/25/04**

Printed Name/Title: **TOM KOSCELNY, ENVIRONMENTAL SUPERVISOR** Signature: _____

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit 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:

Date: **JAN 21 2005**

Printed Name/Title: _____ Signature: _____

PETROLEUM ENGINEER