

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

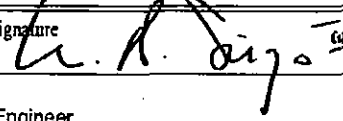
FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. LC-065194
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Endurance Resources, LLC		7. If Unit or CA Agreement, Name and No.
3a. Address 203 West Wall Suite 1000 Midland, Texas 79701	3b. Phone No. (include area code) 432-242-4680	8. Lease Name and Well No. Starcaster 18 Fed - 4H
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 330' FNL & 660' FEL At proposed prod. zone 330' FSL & 660' FEL		9. API Well No.
14. Distance in miles and direction from nearest town or post office* 26 miles Northwest of Jal, New Mexico		10. Field and Pool, or Exploratory Bell Lake; Bone Spring, North (5150)
15. Distance from proposed* 330' location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		11. Sec., T. R. M. or Blk. and Survey or Area Sec 18-23s-34e
16. No. of acres in lease 320		12. County or Parish Lea
17. Spacing Unit dedicated to this well 160		13. State NM
18. Distance from proposed location* 4650' to nearest well, drilling, completed, applied for, on this lease, ft.		20. BLM/BIA Bond No. on file NMB000640
19. Proposed Depth 14,944'		21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3478' GL
22. Approximate date work will start* 05/01/2014		23. Estimated duration 45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must 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 must 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 BLM.

25. Signature 	Name (Printed Typed) M.A. Sirgo III	Date 12/23/2013
Title Engineer		
Approved by (Signature)	Name (Printed Typed)	Date
Title 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.

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.

(Continued on page 2)

*(Instructions on page 2)

OCD Cases# 15074 & 15084
Endurance Resources, LLC
February 20, 2014
Ex# 14

District I
1625 N. French Dr., Hobbs, NM 58240
Phone: (575) 393-6161 Fax: (575) 393-6720
District II
811 S. First St., Artesia, NM 58210
Phone: (575) 748-1233 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 5150	³ Pool Name BELL LAKE; BONE SPRING, NORTH
⁴ Property Code	⁵ Property Name STARCASTER 18 FEDERAL	⁶ Well Number 4H
⁷ OGRID No. 270329	⁸ Operator Name ENDURANCE RESOURCES, LLC	⁹ Elevation 3478.6

" Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	18	23 S	34 E		330	NORTH	660	EAST	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
P	18	23 S	34 E		330	SOUTH	660	EAST	LEA

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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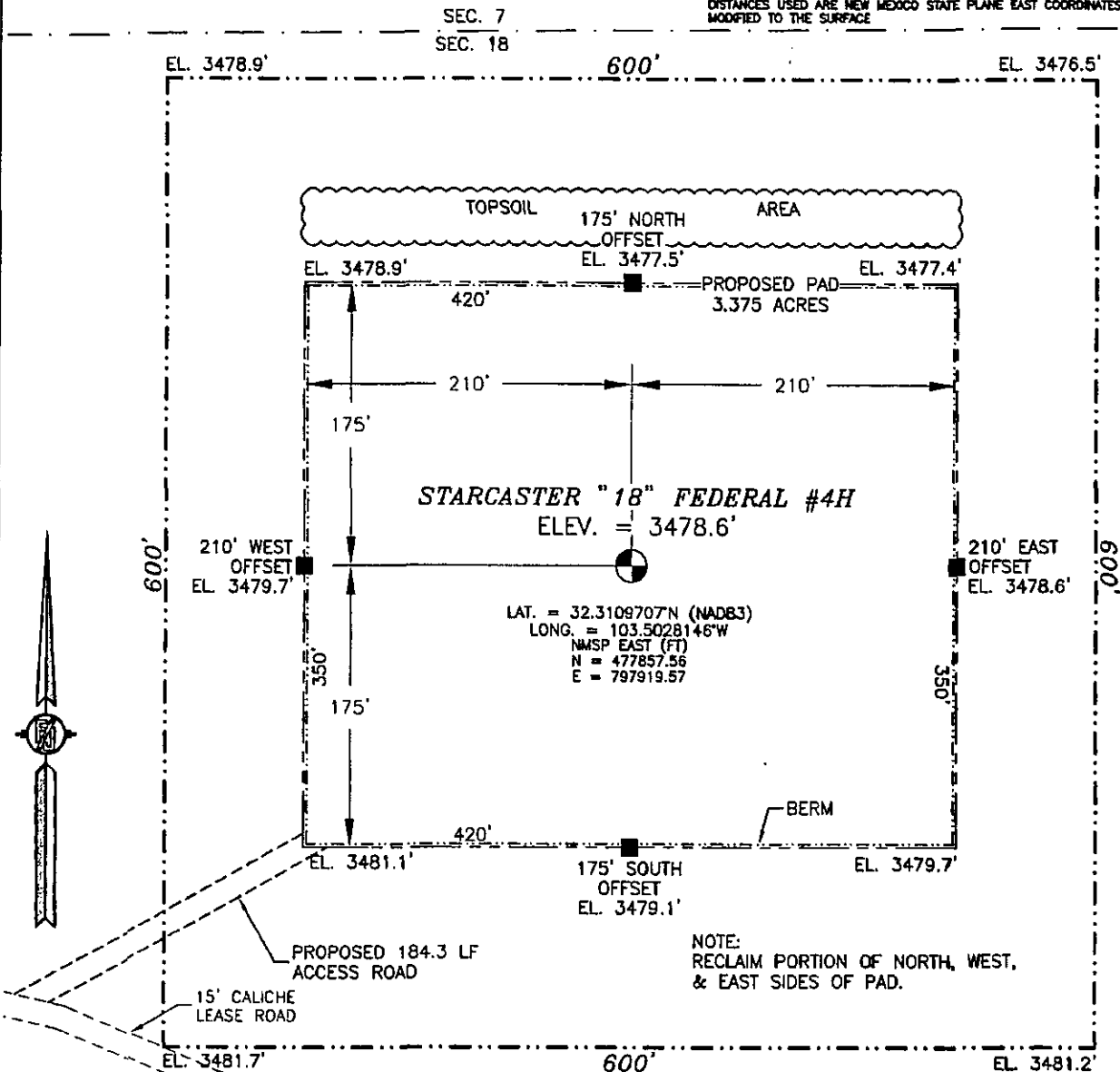
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p>N89°33'21"E 2552.06 FT</p> <p>NW CORNER SEC. 18 LAT. = 32.3118793°N LONG. = 103.5175130°W NMSP EAST (FT) N = 478153.24 E = 793375.98</p>		<p>N89°34'54"E 2649.38 FT</p> <p>N CORNER SEC. 18 LAT. = 32.3118769°N LONG. = 103.5006805°W NMSP EAST (FT) N = 478192.36 E = 798576.30</p>		<p>660'</p> <p>330'</p> <p>SURFACE LOCATION</p> <p>STARCASTER "18" FEDERAL 14H ELEV. = 3478.6' LAT. = 32.3109707°N (NAD83) LONG. = 103.5028146°W NMSP EAST (FT) N = 477857.56 E = 797919.57</p>	<p>500°32'07"E 2642.32 FT</p> <p>500°33'31"E 2638.93 FT</p>	<p>" OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order performed in accordance with the division rules. Signature: <u>M. A. Sirgo, III</u> Date: <u>12-23-13</u> Printed Name: <u>M. A. Sirgo, III</u> E-mail Address: <u>manny@enduranceresourcesllc.com</u></p>
<p>W O CORNER SEC. 18 LAT. = 32.3046243°N LONG. = 103.5175146°W NMSP EAST (FT) N = 475513.85 E = 793395.55</p>		<p>E O CORNER SEC. 18 LAT. = 32.3046154°N LONG. = 103.5006671°W NMSP EAST (FT) N = 475550.64 E = 798600.99</p>				
<p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE.</p>		<p>BOTTOM OF HOLE LAT. = 32.2982717°N LONG. = 103.5027878°W NMSP EAST (FT) N = 473237.70 E = 797963.64</p>		<p>500°33'31"E 2638.93 FT</p> <p>500°36'17"W 2606.08 FT</p>	<p>"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. NOVEMBER 19, 2013 Date of Survey: <u>12/9/13</u> Signature and Seal of Professional Surveyor: <u>[Signature]</u> Certificate Number: <u>PLT 10001 JARANTILLO, PLS 12797</u> SURVEY NO. 3444</p>	
<p>SW CORNER SEC. 18 LAT. = 32.2973745°N LONG. = 103.5175145°W NMSP EAST (FT) N = 472876.37 E = 793415.66</p>		<p>SE CORNER SEC. 18 LAT. = 32.2973633°N LONG. = 103.5006501°W NMSP EAST (FT) N = 472912.33 E = 798626.73</p>				

SECTION 18, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SITE MAP

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE



010 50 100 200

SCALE 1" = 100'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF CR 21 (DELAWARE BASIN) AND CR 21-B (SHELL) GO NORTH ON CR 21 FOR APPROX. 4.0 MILES. GO SOUTHEAST ON CALICHE LEASE ROAD (NORTH OF CATTLE GUARD) FOR APPROX. 0.5 OF A MILE. LOCATION IS APPROX. 440' NORTH.

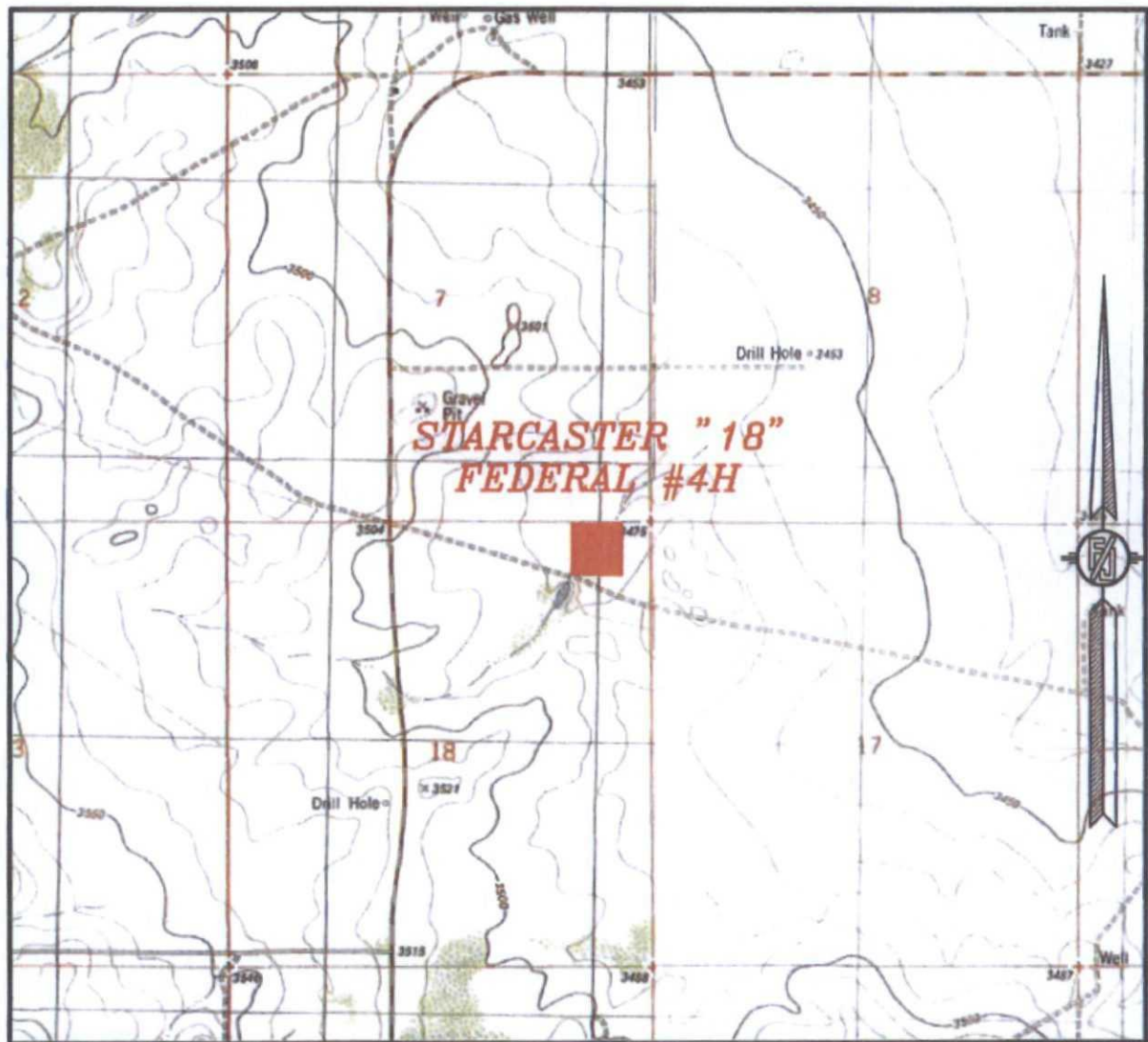
ENDURANCE RESOURCES, LLC
STARCASTER "18" FEDERAL #4H
LOCATED 330 FT. FROM THE NORTH LINE
AND 660 FT. FROM THE EAST LINE OF
SECTION 18, TOWNSHIP 23 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

NOVEMBER 19, 2013

SURVEY NO. 2444

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341 CARLSBAD, NEW MEXICO

SECTION 18, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
TIP TOP WELLS

NOT TO SCALE

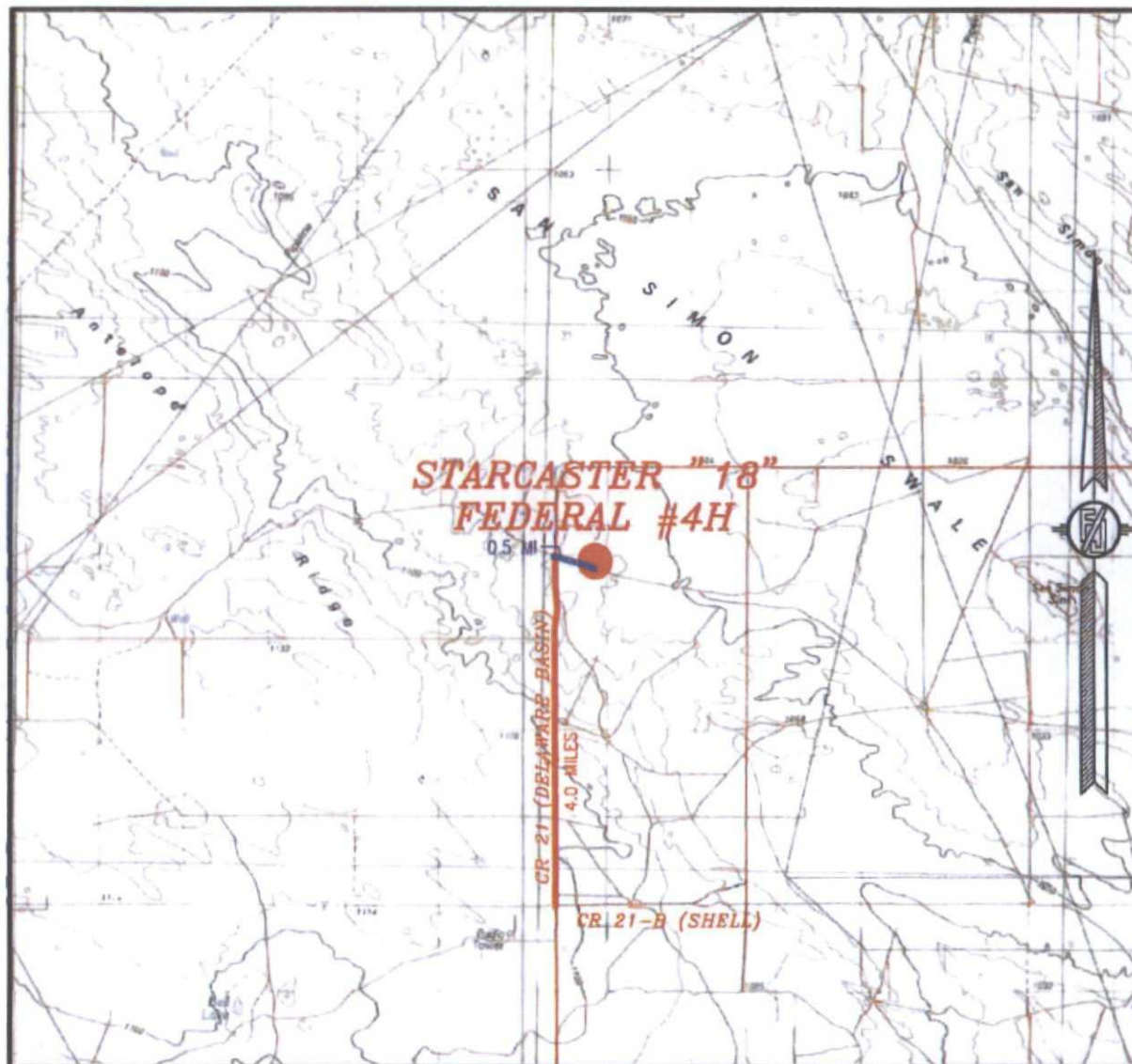
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SECTION 18, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
VICINITY MAP



ENDURANCE RESOURCES, LLC
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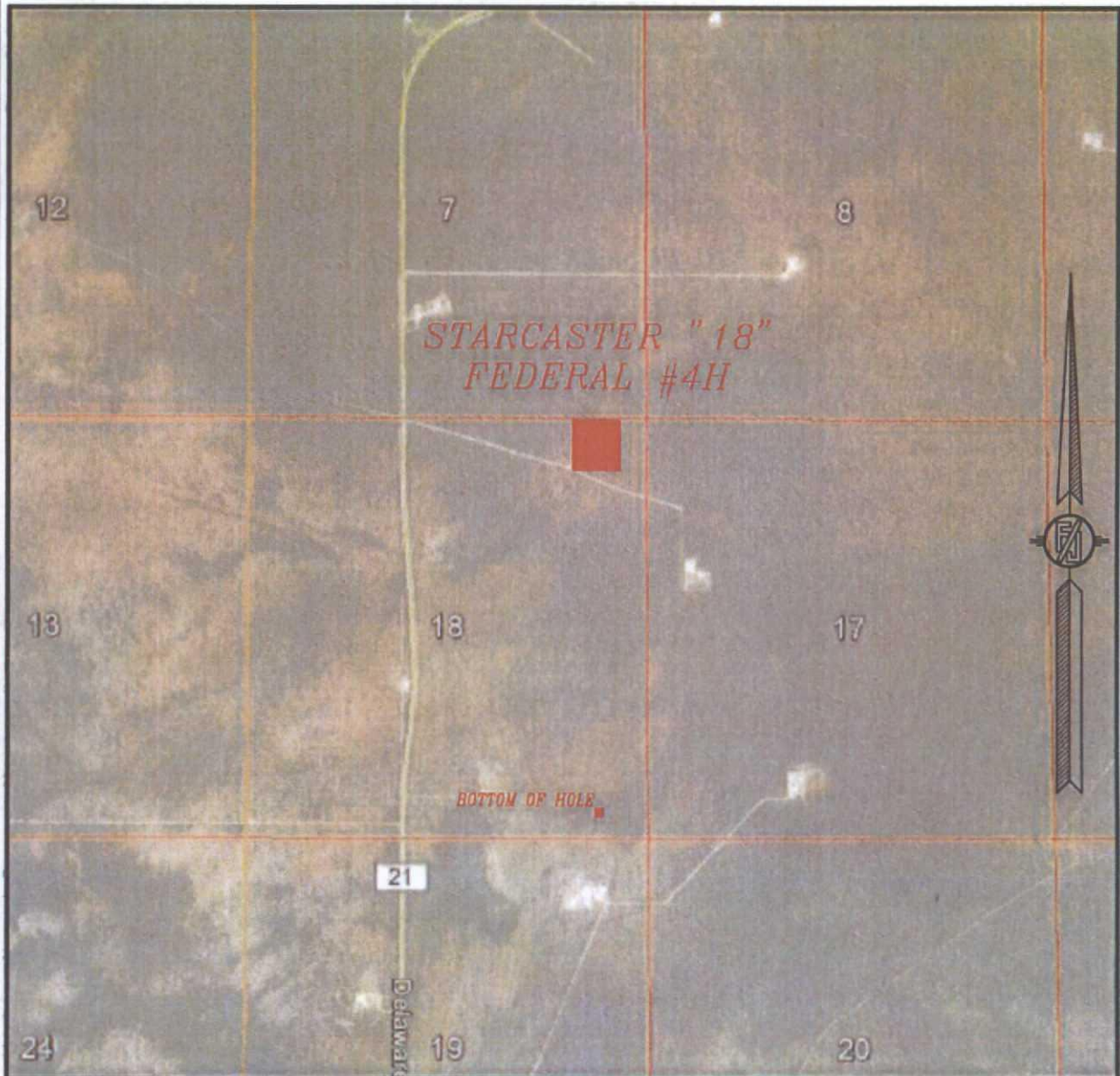
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SECTION 18, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
MARCH 2012

ENDURANCE RESOURCES, LLC
STARCASTER "18" FEDERAL #4H
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AND 660 FT. FROM THE EAST LINE OF
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RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

NOVEMBER 19, 2013

SURVEY NO. 2444

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO
(575) 234-3341



Endurance Resources LLC

DRILLING & OPERATIONS PROGRAM

Starcaster 18 Fed 4H

SHL: 330' FNL & 660' FEL (A)

BHL: 330' FSL & 660' FEL (P)

Sec 18-23S-34E

Lea Co, NM

1. Geological Name of Surface Formation

Quaternary

2. Estimated Tops of Important Geological Markers

Fresh Water	311'
Rustler	1,040'
Top of Salt	1,650'
Base of Salt	4,454'
Lamar Limestone	3,420'
Delaware	5,150' Oil
Bone Spring	8,630'
1 st Bone Spring	9,750' Oil
2 nd Bone Spring	10,275' Oil
3 rd Bone Spring	10,707' Oil
TVD: 10,570' ; MD: 14,944'	

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

The estimated depths at which water, oil and gas will be encountered are as follows:

Water: Average depth to water: 311'. Minimum depth: 255'. Max: 430'. As reported from the New Mexico Office of the State Engineer website.

Oil & Gas: 5,150' – 10,500' (Delaware through Bone Spring)



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No other formations are expected to give up oil, gas, or fresh water in measurable quantities.

4. Proposed Casing Program:

Size	Depth	#/ft	Grade	Collapse	Burst	Tension
13-3/8"	1,300'	54.5	J-55	1.67	4.04	7.25
9-5/8"	5,250'	40.0	L-80	1.13	2.11	3.46
5-1/2"	14,944'	20.0	P-110	1.88	2.10	2.18

NOTE: ALL CASING IS NEW & API APPROVED. WHILE RUNNING CASING, PIPE WILL BE KEPT A MINIMUM OF 1/3 FULL AT ALL TIMES TO AVOID APPROACHING COLLAPSE PRESSURE OF THE CASING. SURFACE CASING WILL BE WATCHED & NECESSARY ADJUSTMENTS MADE TO ENSURE PIPE IS FULL DUE TO LOST CIRCULATION ZONES THAT MAY OCCUR. CENTRALIZERS WILL BE USED ON SURFACE CASING

5. Proposed Cement Program:

a. 13-3/8" Surface

Lead: 800 sks 35/65 Poz Class C (13.7ppg / 1.67cuft/sk)

Tail: 550 sks Class C + 0.2% retarder (14.80ppg / 1.33cuft/sk)

**Calculated w/ 100% excess on OH volume

b. 9-5/8" Intermediate

Lead: 1400 sks 35/65 Poz Class C + HR-800 Retarder + 0.125 lbm/sk Poly-E-Flake Lost Circulation Additive (12.9ppg / 1.85cuft/sk)

Tail: 300sks Class C + 0.2% retarder (14.80ppg / 1.33cuft/sk)

**Calculated w/ 100% excess on OH volumes & 10% in CH

c. 5-1/2" Production

Lead: 1300 sks 50/50 Poz (Class H) + 3 lbm/sk Kol-Seal Lost Circulation Additive + 0.125 lbm/sk Poly-E-Flake Lost Circulation Additive + 0.25% HR-601 Retarder + 0.5 lbm/sk D-Air 5000 Defoamer) (11.5ppg/ 2.39cuft/sk)

Tail: 1100 sks Class H + 0.5% HaladR-344 Low Fluid Loss Control + 0.25% CFR-3 Dispersant + 1 lbm/sk Salt Dispersant + 0.25% HR-601 Retarder + 0.25% HR-601 Retarder (13.2ppg/ 1.61cuft/sk)



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****Calculated w/ 100% excess in vertical OH, 35% excess on OH volumes & 10% in CH**

NOTE: THE ABOVE CEMENT VOLUMES COULD BE REVISED PENDING FLUID CALIPER & CALIPER LOG DATA. ALL VOLUMES ARE DESIGNED TO CIRCULATE TO SURFACE.

6. Minimum Specifications for Pressure Control:

13-5/8 (5M) working pressure BOP system consisting of one set of blind rams and one set of pipe rams and a 5000# annular type preventer (please see BOP schematic). A 5M choke manifold & 120 gallon accumulator with floor and remote operating stations & auxiliary power system. Rotating head as needed. A Kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

BOP unit will be hydraulically operated. BOP will be NU and operated at least once a day while drilling and the blind rams will be operated when out of the hole during trips. From the base of the 13-3/8" csg through running of production casing, the well will be equipped with a 5M BOP system. Below the 9-5/8 csg shoe, this 5M system will be equipped with a HCR valve, remote kill line, & annular to match. The remote kill line will be installed prior to testing the system & tested to stack pressure.

Before drilling out of the 13-3/8 surface casing, BOP will be tested by an independent surface company to 250 psi low & 3000 psi high. Hydril will be tested to 250 psi low and 1500 psi high. Before drilling out the 9-5/8 intermediate shoe BOP will be tested by an independent service company to 250psi low and 5000 psi high. Hydril will be tested to 250 psi low and 2500 psi high. These low pressure tests from 250 to 300 psi will be held a minimum of 10 minutes if test is done with a test plug & 30 minutes without a test plug.

7. Estimated BHP:

4752 psi @ 10,570' TVD

8. Mud Program: The applicable depths & properties of this system are as follows:



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Depth	Type of System	Mud Weight	Viscosity (sec)	Waterloss (cc)
0 – 1,250'	Fresh	8.4	29-32	NC
1,250' – 5,100'	Brine	10.0	28-32	NC
5,100' – 14,994'	Cut Brine	8.3 – 9.3	28-32	NC-12

NOTE: NECESSARY MUD PRODUCTS FOR WEIGHT ADDITION & FLUID LOSS WILL BE ON LOCATION AT ALL TIMES. VISUAL MUD MONITORING EQUIPMENT (I.E. TRIP TANK) WILL BE IN PLACE TO DETECT VOLUME CHANGES INDICATING LOSS OR GAIN OF CIRCULATION VOLUME WITH ALARMS.

9. Auxiliary Well Control & Monitoring Equipment:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times
- H₂S detection equipment will be in operation & breathing apparatuses will be on location after the drill out of the 13-3/8" casing shoe until the 5-1/2" casing is cemented.

10. Testing, Logging & Coring Program:

- No drill stem tests are planned.
- GR/N well log ran from KOP to surface.
- Triple combo logs from KOP to intermediate casing shoe.
- No coring is planned.

11. Potential Hazards:

No abnormal pressures or temperatures are expected. If H₂S is encountered, Endurance Resources LLC will comply with Onshore Order #6. Regardless, all personnel will be trained & qualified with H₂S safety. Rig safety equipment will all also be checked daily once drill out of the 13-3/8" casing shoe to TD. It has been noted that H₂S has been encountered in the salt section. If H₂S is encountered, measurements & formations will be reported to the BLM.



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RESOURCES, LLC

12. Anticipated starting date & Duration of Operations:

Road & location construction will begin after the BLM has approved the APD. Anticipated spud date will begin after BLM approval & after a drilling rig is secured. Move in operations & drilling is expected to take no more than 45 days. An additional 30-50 days will be needed to complete this well & construct surface facilities and/or lay flow lines in order to place well on production.

Endurance Resources LLC

HALLIBURTON

Sperry Drilling Services

Project: Lea County, NM (NAD 83)
Site: Starcaster 18 Fed
Well: Starcaster 18 Fed #4H
Wellbore: Wellbore #1
Plan: Plan #1
Rig: McVay 6

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9997.04	0.00	0.00	9997.04	0.00	0.00	0.00	0.00	0.00	Start Build
10897.04	90.00	179.45	10570.00	-572.93	5.47	10.00	179.45	572.96	End Build
14944.15	90.00	179.45	10570.00	-4619.86	44.07	0.00	0.00	4620.07	TD

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
Starcaster 18 Fed #4H BHL	10570.00	-4619.86	44.07	473237.70	797963.64

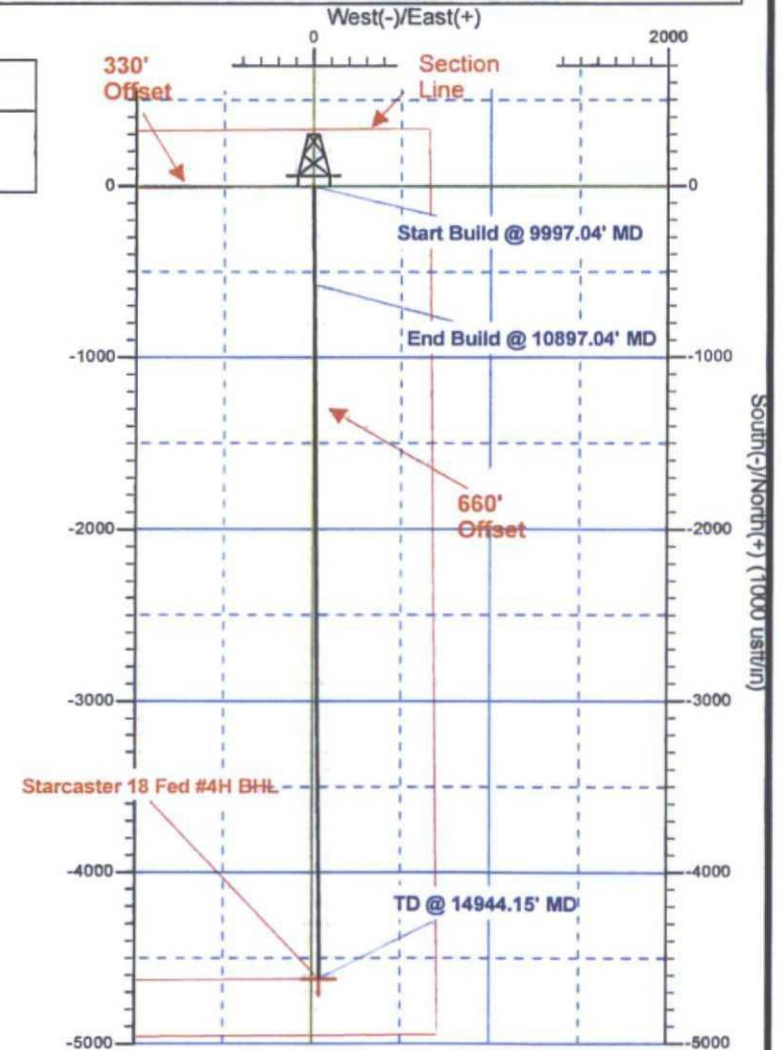
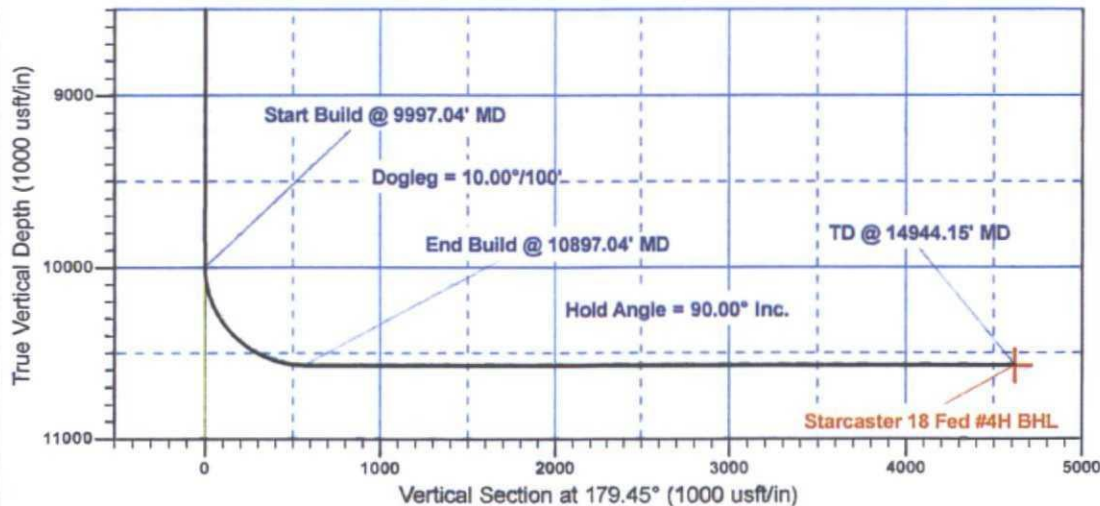
Surface Location:

US State Plane 1983
 New Mexico Eastern Zone
 Elevation: GL 3478.6' + KB 18' @ 3496.60usft (McVay 6)

Northing	Easting	Latitude	Longitude
477857.56	797919.57	32° 18' 39.495 N	103° 30' 10.133 W

To convert a Magnetic Direction to a Grid Direction, Add 6.92°

Magnetic Model: BGGM2013 Date: 04-Dec-13
 Azimuths to Grid North



Endurance Resources LLC

Lea County, NM (NAD 83)

Starcaster 18 Fed

Starcaster 18 Fed #4H

Wellbore #1

Plan: Plan #1

Sperry Drilling Services Proposal Report

04 December, 2013

Well Coordinates: 477,857.56 N, 797,919.57 E (32° 18' 39.49" N, 103° 30' 10.13" W)
Ground Level: 3,478.60 usft

Local Coordinate Origin:	Centered on Well Starcaster 18 Fed #4H
Viewing Datum:	GL 3478.6' + KB 18' @ 3496.60usft (McVay 6)
TVDs to System:	N
North Reference:	Grid
Unit System:	API - US Survey Feet

Version: 5000.1 Build: 65

HALLIBURTON

Plan Report for Starcaster 18 Fed #4H - Plan #1

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	Toolface Azimuth (°)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

HALLIBURTON**Plan Report for Starcaster 18 Fed #4H - Plan #1**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	Toolface Azimuth (°)
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9,997.04	0.00	0.00	9,997.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build @ 9997.04' MD - Dogleg = 10.00°/100'										
10,000.00	0.30	179.45	10,000.00	-0.01	0.00	0.01	10.00	10.00	0.00	179.45
10,050.00	5.30	179.45	10,049.92	-2.45	0.02	2.45	10.00	10.00	0.00	0.00
10,100.00	10.30	179.45	10,099.45	-9.23	0.09	9.23	10.00	10.00	0.00	0.00
10,150.00	15.30	179.45	10,148.19	-20.30	0.19	20.30	10.00	10.00	0.00	0.00
10,200.00	20.30	179.45	10,195.78	-35.57	0.34	35.57	10.00	10.00	0.00	0.00
10,250.00	25.30	179.45	10,241.86	-54.94	0.52	54.94	10.00	10.00	0.00	0.00
10,300.00	30.30	179.45	10,286.08	-78.24	0.75	78.25	10.00	10.00	0.00	0.00
10,350.00	35.30	179.45	10,328.10	-105.32	1.00	105.32	10.00	10.00	0.00	0.00
10,400.00	40.30	179.45	10,367.59	-135.95	1.30	135.95	10.00	10.00	0.00	0.00
10,450.00	45.30	179.45	10,404.27	-169.90	1.62	169.91	10.00	10.00	0.00	0.00
10,500.00	50.30	179.45	10,437.85	-206.93	1.97	206.94	10.00	10.00	0.00	0.00
10,550.00	55.30	179.45	10,468.07	-246.74	2.35	246.75	10.00	10.00	0.00	0.00
10,600.00	60.30	179.45	10,494.71	-289.03	2.76	289.04	10.00	10.00	0.00	0.00
10,650.00	65.30	179.45	10,517.56	-333.48	3.18	333.50	10.00	10.00	0.00	0.00
10,700.00	70.30	179.45	10,536.45	-379.76	3.62	379.78	10.00	10.00	0.00	0.00
10,750.00	75.30	179.45	10,551.24	-427.50	4.08	427.52	10.00	10.00	0.00	0.00

HALLIBURTON**Plan Report for Starcaster 18 Fed #4H - Plan #1**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	Toolface Azimuth (°)
10,800.00	80.30	179.45	10,561.80	-476.36	4.54	476.38	10.00	10.00	0.00	0.00
10,850.00	85.30	179.45	10,568.07	-525.94	5.02	525.97	10.00	10.00	0.00	0.00
10,897.04	90.00	179.45	10,570.00	-572.93	5.47	572.96	10.00	10.00	0.00	0.00
End Build @ 10897.04' MD - Hold Angle = 90.00° Inc.										
10,900.00	90.00	179.45	10,570.00	-575.89	5.49	575.92	0.00	0.00	0.00	0.00
11,000.00	90.00	179.45	10,570.00	-675.88	6.45	675.92	0.00	0.00	0.00	0.00
11,100.00	90.00	179.45	10,570.00	-775.88	7.40	775.92	0.00	0.00	0.00	0.00
11,200.00	90.00	179.45	10,570.00	-875.88	8.36	875.92	0.00	0.00	0.00	0.00
11,300.00	90.00	179.45	10,570.00	-975.87	9.31	975.92	0.00	0.00	0.00	0.00
11,400.00	90.00	179.45	10,570.00	-1,075.87	10.26	1,075.92	0.00	0.00	0.00	0.00
11,500.00	90.00	179.45	10,570.00	-1,175.86	11.22	1,175.92	0.00	0.00	0.00	0.00
11,600.00	90.00	179.45	10,570.00	-1,275.86	12.17	1,275.92	0.00	0.00	0.00	0.00
11,700.00	90.00	179.45	10,570.00	-1,375.85	13.12	1,375.92	0.00	0.00	0.00	0.00
11,800.00	90.00	179.45	10,570.00	-1,475.85	14.08	1,475.92	0.00	0.00	0.00	0.00
11,900.00	90.00	179.45	10,570.00	-1,575.84	15.03	1,575.92	0.00	0.00	0.00	0.00
12,000.00	90.00	179.45	10,570.00	-1,675.84	15.99	1,675.92	0.00	0.00	0.00	0.00
12,100.00	90.00	179.45	10,570.00	-1,775.83	16.94	1,775.92	0.00	0.00	0.00	0.00
12,200.00	90.00	179.45	10,570.00	-1,875.83	17.89	1,875.92	0.00	0.00	0.00	0.00
12,300.00	90.00	179.45	10,570.00	-1,975.83	18.85	1,975.92	0.00	0.00	0.00	0.00
12,400.00	90.00	179.45	10,570.00	-2,075.82	19.80	2,075.92	0.00	0.00	0.00	0.00
12,500.00	90.00	179.45	10,570.00	-2,175.82	20.76	2,175.92	0.00	0.00	0.00	0.00
12,600.00	90.00	179.45	10,570.00	-2,275.81	21.71	2,275.92	0.00	0.00	0.00	0.00
12,700.00	90.00	179.45	10,570.00	-2,375.81	22.66	2,375.92	0.00	0.00	0.00	0.00
12,800.00	90.00	179.45	10,570.00	-2,475.80	23.62	2,475.92	0.00	0.00	0.00	0.00
12,900.00	90.00	179.45	10,570.00	-2,575.80	24.57	2,575.92	0.00	0.00	0.00	0.00
13,000.00	90.00	179.45	10,570.00	-2,675.79	25.53	2,675.92	0.00	0.00	0.00	0.00
13,100.00	90.00	179.45	10,570.00	-2,775.79	26.48	2,775.92	0.00	0.00	0.00	0.00
13,200.00	90.00	179.45	10,570.00	-2,875.78	27.43	2,875.92	0.00	0.00	0.00	0.00
13,300.00	90.00	179.45	10,570.00	-2,975.78	28.39	2,975.92	0.00	0.00	0.00	0.00
13,400.00	90.00	179.45	10,570.00	-3,075.78	29.34	3,075.92	0.00	0.00	0.00	0.00
13,500.00	90.00	179.45	10,570.00	-3,175.77	30.29	3,175.92	0.00	0.00	0.00	0.00
13,600.00	90.00	179.45	10,570.00	-3,275.77	31.25	3,275.92	0.00	0.00	0.00	0.00
13,700.00	90.00	179.45	10,570.00	-3,375.76	32.20	3,375.92	0.00	0.00	0.00	0.00
13,800.00	90.00	179.45	10,570.00	-3,475.76	33.16	3,475.92	0.00	0.00	0.00	0.00
13,900.00	90.00	179.45	10,570.00	-3,575.75	34.11	3,575.92	0.00	0.00	0.00	0.00
14,000.00	90.00	179.45	10,570.00	-3,675.75	35.06	3,675.92	0.00	0.00	0.00	0.00
14,100.00	90.00	179.45	10,570.00	-3,775.74	36.02	3,775.92	0.00	0.00	0.00	0.00
14,200.00	90.00	179.45	10,570.00	-3,875.74	36.97	3,875.92	0.00	0.00	0.00	0.00
14,300.00	90.00	179.45	10,570.00	-3,975.73	37.93	3,975.92	0.00	0.00	0.00	0.00
14,400.00	90.00	179.45	10,570.00	-4,075.73	38.88	4,075.92	0.00	0.00	0.00	0.00
14,500.00	90.00	179.45	10,570.00	-4,175.73	39.83	4,175.92	0.00	0.00	0.00	0.00
14,600.00	90.00	179.45	10,570.00	-4,275.72	40.79	4,275.92	0.00	0.00	0.00	0.00
14,700.00	90.00	179.45	10,570.00	-4,375.72	41.74	4,375.92	0.00	0.00	0.00	0.00
14,800.00	90.00	179.45	10,570.00	-4,475.71	42.69	4,475.92	0.00	0.00	0.00	0.00
14,900.00	90.00	179.45	10,570.00	-4,575.71	43.65	4,575.92	0.00	0.00	0.00	0.00
14,944.15	90.00	179.45	10,570.00	-4,619.86	44.07	4,620.07	0.00	0.00	0.00	0.00
TD @ 14944.15' MD - Starcaster 18 Fed #4H BHU										

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,997.04	9,997.04	0.00	0.00	Start Build @ 9997.04' MD
9,997.04	9,997.04	0.00	0.00	Dogleg = 10.00°/100'
10,897.04	10,570.00	-572.93	5.47	End Build @ 10897.04' MD
10,897.04	10,570.00	-572.93	5.47	Hold Angle = 90.00° Inc.
14,944.15	10,570.00	-4,619.86	44.07	TD @ 14944.15' MD

Plan Report for Starcaster 18 Fed #4H - Plan #1

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/_S (usft)	Origin +E/-W (usft)	Start TVD (usft)
TD	No Target (Freehand)	179.45	Slot	0.00	0.00	0.00

Survey tool program

From (usft)	To (usft)	Plan #1	Survey/Plan	Survey Tool
0.00	14,944.15			MWD

Targets associated with this wellbore

Target Name	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Shape
Starcaster 18 Fed #4H BHL	10,570.00	-4,619.86	44.07	Point

HALLIBURTON**North Reference Sheet for Starcaster 18 Fed - Starcaster 18 Fed #4H - Wellbore #1**

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to GL 3478.6' + KB 18' @ 3496.60usft (McVay 6). Northing and Easting are relative to Starcaster 18 Fed #4H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is -104.33°, Longitude Origin: 0° 0' 0.000 E°, Latitude Origin: 0° 0' 0.000 N°

False Easting: 541,337.50usft, False Northing: 0.00usft, Scale Reduction: 0.99998449

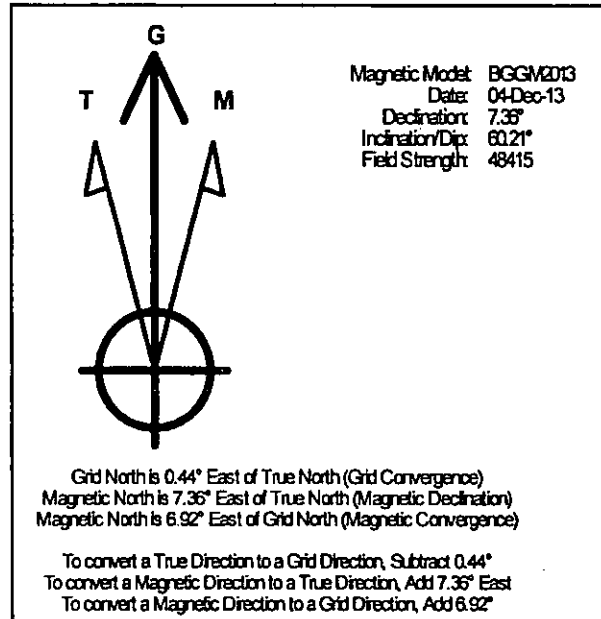
Grid Coordinates of Well: 477,857.56 usft N, 797,919.57 usft E

Geographical Coordinates of Well: 32° 18' 39.49" N, 103° 30' 10.13" W

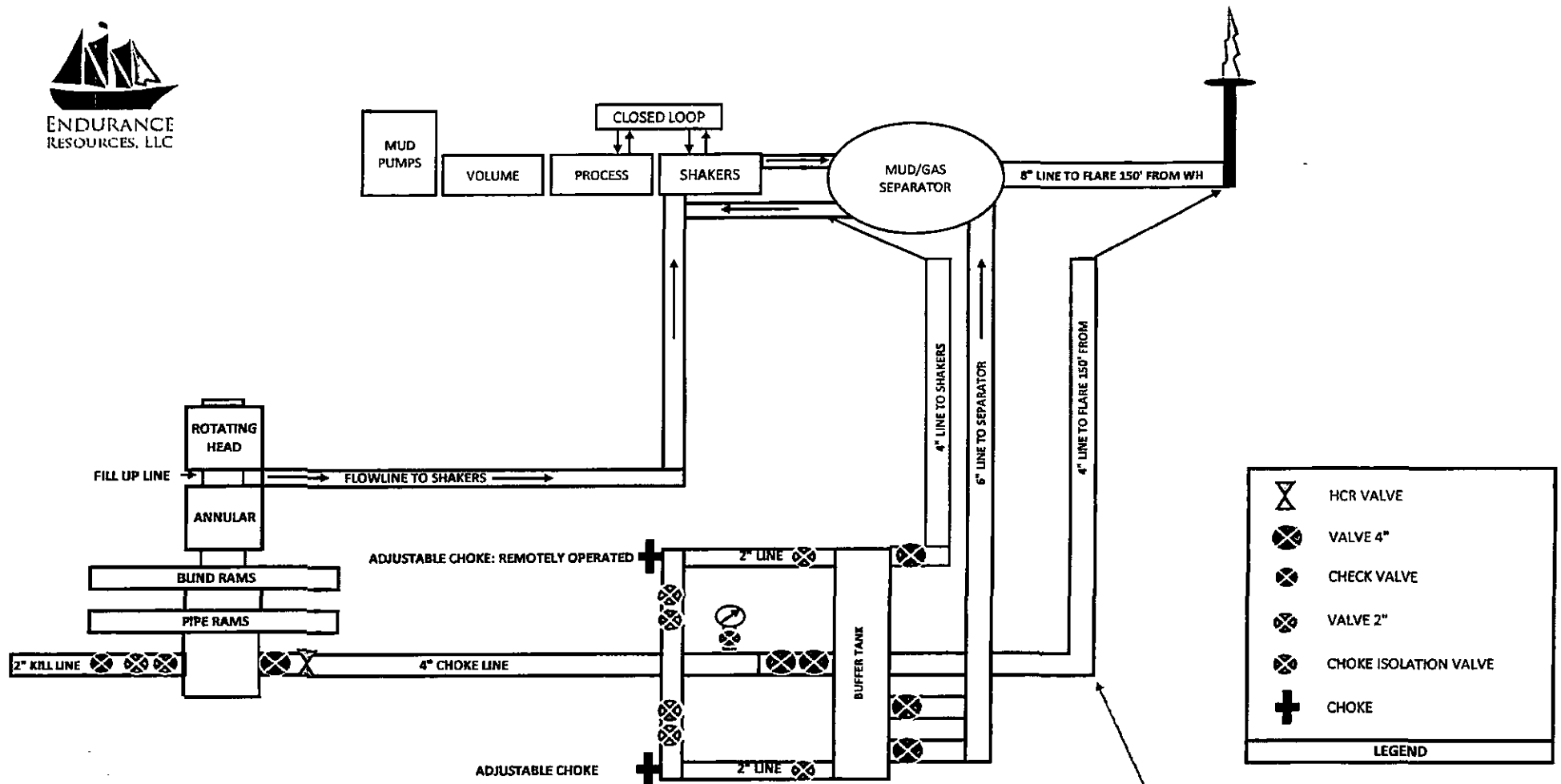
Grid Convergence at Surface is: 0.44°

Based upon Minimum Curvature type calculations, at a Measured Depth of 14,944.15usft
the Bottom Hole Displacement is 4,620.07usft in the Direction of 179.45° (Grid).

Magnetic Convergence at surface is: -6.92° (4 December 2013, , BGGM2013)



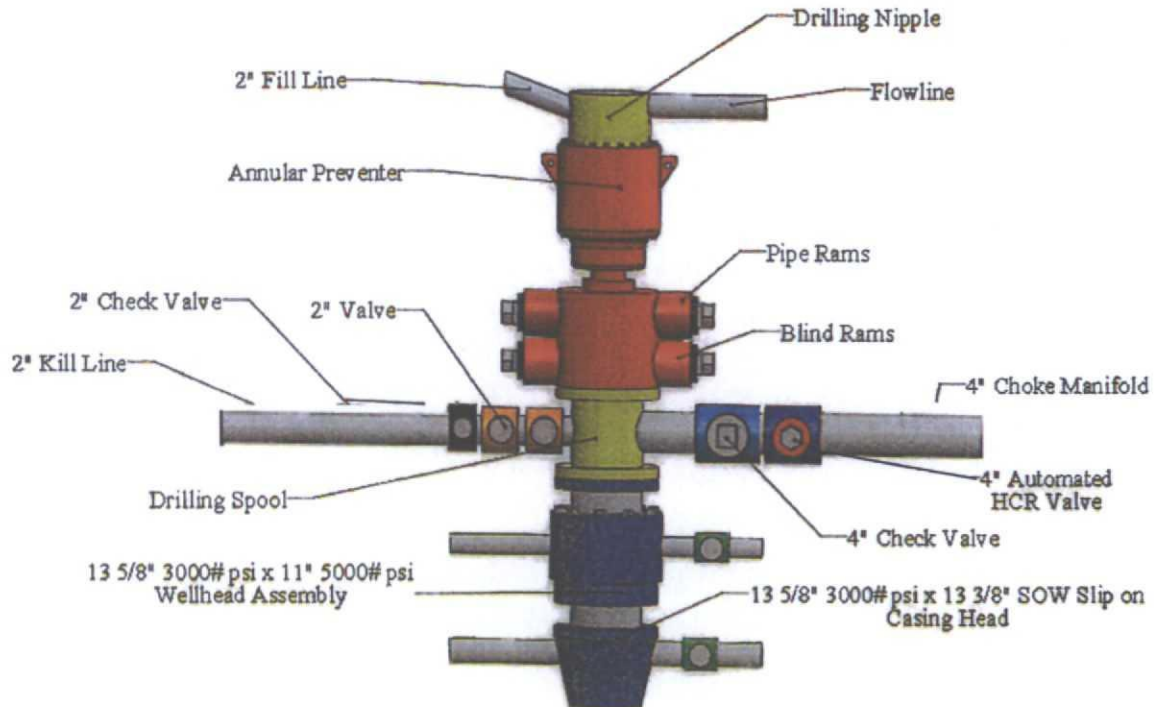
5M BOP, 5M CHOKE MANIFOLD, AND CLOSED LOOP EQUIPMENT SCHEMATIC FOR 13-5/8 BOP SYSTEM TESTED TO 3M PER ONSHORE ORDER #2



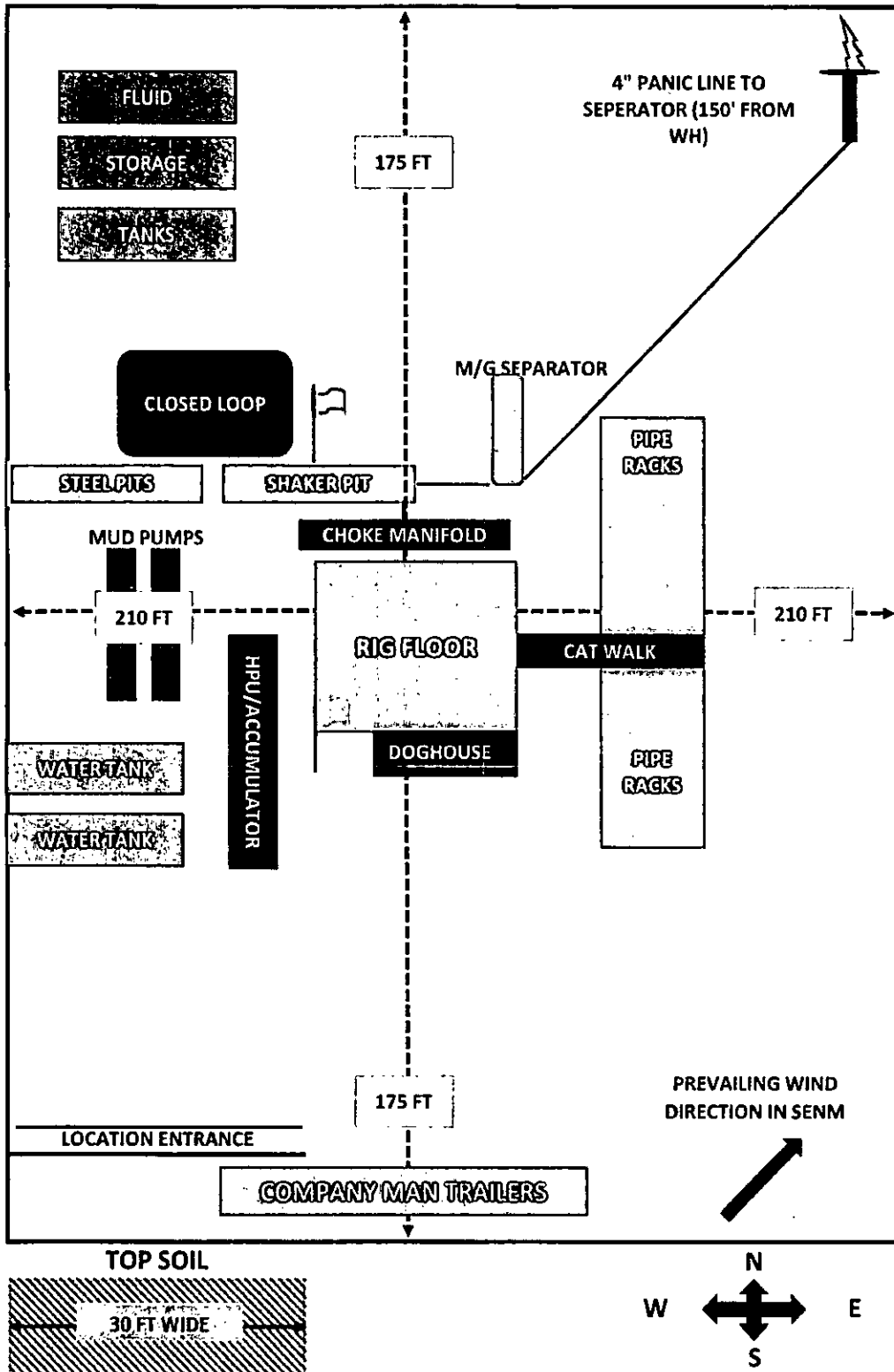
TARGETED T'S. ALL TURNS WILL BE TARGETED.
 OPTION TO USE FLEX HOUSE. TBD ONCE DRILLING RIG IS SECURED. WILL SUNDRY.
 ALL CHOKE LINES WILL BE STRAIGHT LINES UNLESS TURNS THAT USE TEE BLOCKS OR ARE
 TARGETED WITH RUNNING TEES, AND WILL BE ANCHORED TO PREVENT WHIP & REDUCE VIBRATION

SG 12 Fed #1H

5000# BOP



ENDURANCE RESOURCES LLC
RIG LOCATION LAYOUT
WELL PAD 420' X 350'
Starcaster 18 Fed 4H





**Endurance Resources LLC
15455 Dallas Parkway, Suite 1050
Addison, TX 75001**

Hydrogen Sulfide (H₂S) Contingency Plan

For

Starcaster 18 Fed 4H

**Starcaster 18 Fed 4H
SHL: 330' FNL & 660' FEL (A)
BHL: 330' FSL & 660' FEL (P)
Sec 18-23S-34E
Lea Co, NM**



Escape:

In the event of an emergency, crews shall escape upwind of any H₂S gas that is released. Escape routes can be facilitated from the location entrance road, then due west on lease road. Depending on wind direction, the intersection of CR-21 and the lease road will be the mustard point. Crews should then block entrance to location from the lease road so as not to allow anyone traversing into a hazardous area. This blockade should be at a safe distance outside of the ROE. ***There are no homes or buildings in or near the ROE.***

Assumed 100ppm ROE=3000'

100ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures:

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE
- Evacuate any public places encompassed by the 100 ppm ROE
- Be equipped with H₂S monitors and air packs in order to control the release
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation
- Contact operator and/or local officials to aid in operation. **See list of phone numbers attached.**
- Have received training in the 1) detection of H₂S, 2) measures for protection against the gas 3) equipment used for protection & emergency response.



Ignition of Gas Source

SO₂ or Sulfur Dioxide must be taken in precaution should the need to ignite the H₂S gas stream if well control is lost against this gas. Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Wind direction identification whenever there is ignition of H₂S must be taken into consideration as well.

Characteristics of H₂S and SO₂

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

Contacting Authorities

Endurance Resources personnel must liaison with local & state agencies to ensure a proper response to a major release. Additionally, the NMOCD must be notified of the release as soon as possible but no later than 4hrs. Agencies will ask for information such as type & volume of release, wind direction, location of release, ect. Be prepared with all information available. The following call list of essential & potential responders has been prepared for use during a release. Endurance Resources' company response must be in coordination with the HMER.



HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

I. Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following area prior to commencing drilling operations on this well:

1. The hazards & characteristics of hydrogen sulfide (H₂S)
2. The proper use & maintenance of PPE & SCBA systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, & prevailing winds (seasonal).
4. The proper techniques for first aid & rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action & shut-in procedures when drilling or reworking a well, BOP & well control procedures.
3. The contents & requirements of the H₂S Drilling Operations Plan & Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500ft) and weekly H₂S & well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan.

II. H₂S Safety Equipment & Systems

Note: All H₂S safety equipment will be installed, tested, & operational when drilling reaches a depth of 500' above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

A. Well Control Equipment:



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- Flare Line
 - Choke manifold with remotely operated choke
 - Blind rams & pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - Auxiliary equipment to include: annular preventer, mud-gas separator, & rotating head.
- B. Protective equipment for essential personnel:
- 30-minute SCBA units located in the dog house & at briefing areas. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.
- C. H2S detection and monitoring equipment:
- (2) Portable H2S monitors positioned on location for best coverage & response. These units have warning lights & audible sirens when H2S levels of 20ppm are reached. These units are also capable of detecting SO2, which is a byproduct of burning H2S.
- D. Visual warning systems:
- Wind direction indicators: will be shown on well site diagram.
 - Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size so that it is legible at a reasonable distance from the immediate location. Bilingual signs will also be used, when appropriate.
- E. Mud program:
- The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices, and the use of H2S scavengers will help minimize hazards when penetrating H2S bearing zones.
- F. Metallurgy:
- All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, and valves shall be suitable for H2S service.



G. Communication:

- Company vehicles equipped with cellular phones, as well as a satellite phone in the company man's trailer.

ENDURANCE RESOURCES LLC HAS CONDUCTED A REVIEW TO DETERMINE IF AN H2S CONTINGENCY PLAN IS REQUIRED FOR THE ABOVE MENTIONED WELL. WE WERE ABLE TO CONDUCT THAT ANY POTENTIAL HAZARDOUS VOLUME WOULD BE MINIMAL (IF ANY PRESENT) FROM SURFACE TO TD.

EMERGENCY CALL LIST

Endurance Operations Office: (575) 308.0722

Kale Jackson-Sr Completions Engineer: (575) 914.3355

Manny Sirgo- VP Operations: (432) 413.0085

Randall Harris- VP Geology: (575) 365.7747

Don Ritter- CEO: (469) 556.3757

EMERGENCY RESPONSE NUMBERS

HOBBS:

State Police: 575.392.5588

City Police: 575.397.9265

Sherriff's Office: 575.393.2515

Ambulance: 911

Fire Department: 575.397.9308

LEPC: 575.393.2870

NMOCD: 575.393.6161

BLM: 575.393.3612



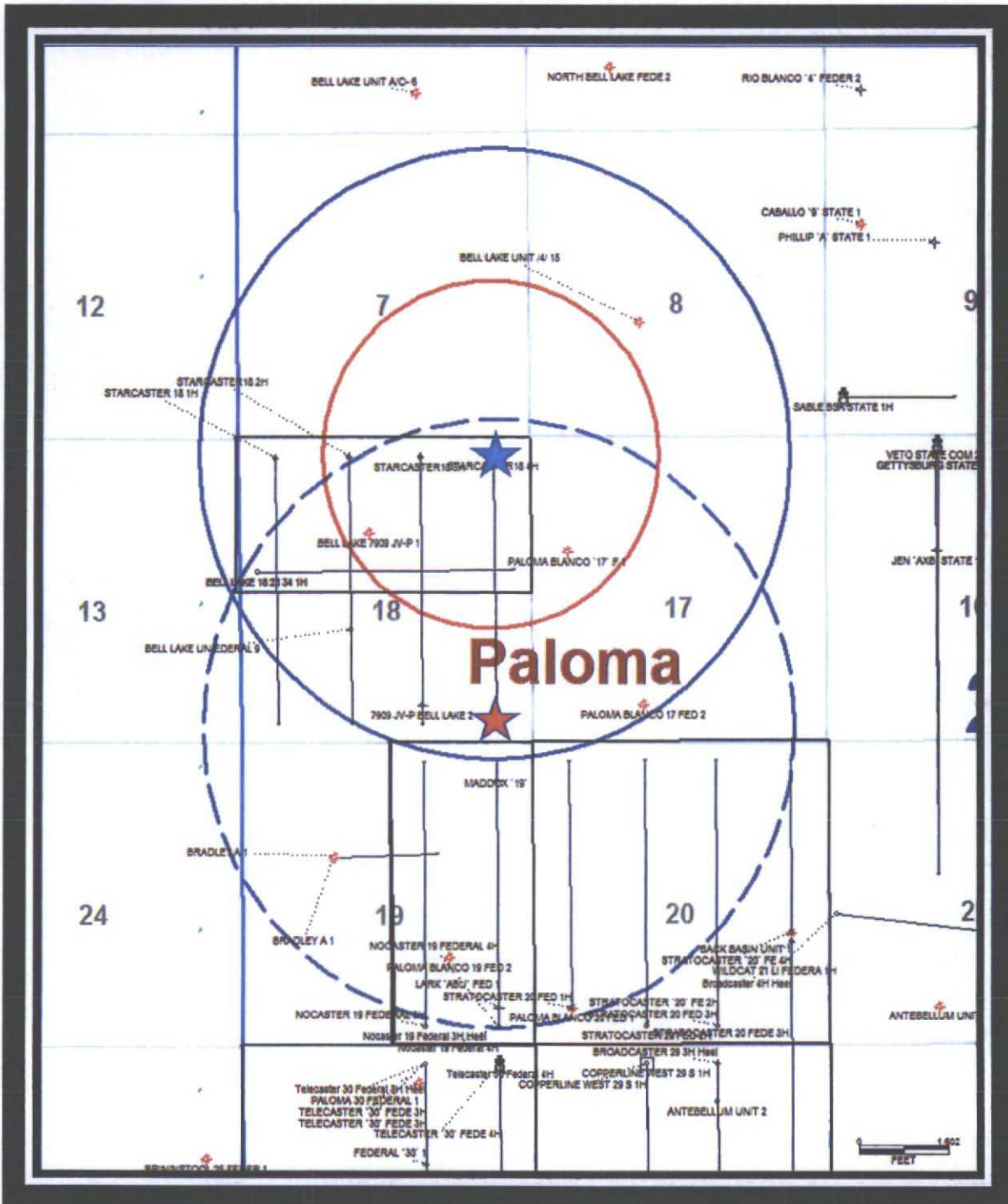
CARLSBAD:

State Police: 575.885.3137
City Police: 575.885.2111
Sherriff's Office: 575.887.7551
Ambulance: 911
Fire Department: 575.885.2111
LEPC: 575.887.3798
BLM: 575.361.2822

EMERGENCY SERVICES:

Boots & Coots: 1.800.256.9688
Cudd Pressure Control: 915.699.0139
Halliburton: 575.746.2757
Baker Hughes: 575.746.3569

Starcaster 18 4H



-  Surface Location
-  Bottom Hole Location
-  H2S 3000' Radius
-  Surface 5280' Radius
-  Bottom Hole 5280' Radius



ENDURANCE RESOURCES LLC

MULTIPOINT SURFACE USE AND OPERATIONS PLAN

**Starcaster 18 Fed 4H
SHL: 330' FNL & 660' FEL (A)
BHL: 330' FSL & 660' FEL (P)
Sec 18-23S-34E
Lea Co, NM**

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above mentioned well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of surface disturbance involved and the procedures to be followed in rehabilitating the surface after the completion of operations, so that a complete appraisal can be made of the environment effect associated with these operations.

Directions:

From the intersection of CR 21 and CR 21-B go north on CR 21 for approx. 4.0 miles. Go southeast on caliche lease road for approx. 0.5 of a mile. Location is approx. 440' north.

1. Existing Roads:

- The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102, page 1. This well was staked by Madron Surveying Inc. from Carlsbad, NM.
- Page 4 of the C-102 packet contains is a Vicinity map showing the well and roads in the vicinity of the proposed location. The proposed well site and the access route is labeled in orange & blue (page 3). The proposed well site and the access route to location are indicated on the Site map (page 2) of C-102 packet. ROW using this existing route is being requested if necessary.
- Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.



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2. Planned Access Road:

- Endurance Resources LLC will be using the existing access road that turns off CR 21. A 200' access road from the existing caliche road that turns off CR 21 to the SW corner of the Starcaster 4H planned wellsite is being requested for ROW.
- This planned access road will have a maximum width of 14 feet of driving surface. The road will be crowned & ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 3ft wide with 3:1 slopes. The driving surface will be made of 6" rolled & compacted caliche.
- This existing road will be rebladed & caliche will be placed into existing holes which will be watered and compacted to prevent surface erosion. The average grade will be approx. 1%. Surface material will be of native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location.
- No cattle guards, gates, or fence cuts will be required. No turnouts are planned.

3. Location of Existing Wells:

- A one mile radius map shows all existing/proposed wells within a one-mile radius of the proposed location. See attached radius plat for more details.

4. Location of Existing and/or Proposed Facilities:

- This location will require "cut & fill" from the south to the north. Well site will be constructed by way of a 420'x350' location. Topsoil pile will be placed on the north side of location. V-door will be facing east.
- In the event this well is found productive, a tank battery will be constructed with (4) 500 bbl oil tanks, (2) 500 bbl water tanks, a separator, a heater treater, a free water knockout, and a gas sales meter on this site. Necessary production equipment is subject to change once offsetting horizontal production is analyzed. Tank battery equipment will be placed on the north side of location, while treating facility equipment will be placed on the west side of location. Note: a distance of 100' is required between fired vessels and any combustibles for safety purposes. This battery will potential handle one more additional horizontal well if area is successful.
- All flow lines will adhere to API standards. Working on ROW for gas takeaway at battery site.
- Power will be supplied by way of existing electrical line running along CR 21. This is an Xcel owned power line. A strip of land 30' wide in Sec 18 will go .45 miles along the existing caliche road to the Starcaster 18 Fed 4H location. A multi-use ROW for this electrical line is being requested to follow the proposed access road into location.

5. Location and Types of Water Supply:

- This location will be drilled using a combination of water mud systems (outlined in the Drilling program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using existing roads. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drilling rig. In these cases where a poly line is used to transport water for drilling or completion purposes, the existing and proposed road into location will be utilized.



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6. Construction Materials:

- All caliche utilized for the drilling pad and access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. If deposits are found underneath the proposed location, topsoil will be pushed back from the drill site & existing caliche will be ripped and compacted. Then topsoil will be stockpiled on location as depicted on the rig layout. All roads will be constructed of 6" rolled and compacted caliche. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.

7. Methods of Handling Waste Material:

- All trash, junk, & other material will be removed from the well site within 30 days after finishing drilling/completion operations. All waste material will be contained in trash bins to prevent scattering. When the job is completed, all contents will be removed and disposed of in an approved sanitary landfill.
- The supplier, including broken sacks, will pick up slats remaining after completion of the well.
- A porto-john will be utilized for handling all gray water/waste material. The equipment will be properly maintained during the drilling and completion operations, and will be removed when all operations are completed. Contents will be removed and disposed of in an approved sanitary landfill. Sewage from living quarters will drain into holding tanks & be cleaned out periodically and hauled to a waste disposal facility.
- Drill cuttings will be separated by a series of solids removal equipment and stored in steel containment pits and then hauled to a state approved disposal facility.
- Drilling fluids will be contained in steel pits in a closed loop circulating system. Fluids will be cleaned and reused. Water produced during testing will be contained in the steel pits & disposed of at a state approved disposal facility. Any oil or condensate produced will be stored in test tanks until sold & hauled from site.

8. Ancillary Facilities:

- No campsites or other facilities will be constructed as a result of this well.

9. Wellsite Layout:

- Attached is the proposed well site layout with dimensions of the pad layout & topsoil pile.
- Mud pits in the active circulating system will be steel pits and a closed loop system will be utilized.
- This location will require "cut & fill" from the south to the north. Well site will be constructed by way of a 475'x300' pad. Topsoil pile will be placed on the south side of location. V-door will be facing east.
- If the well is a producer, those areas of the location not essential to production facilities will be reclaimed & seeded per BLM requirements.

10. Plans for Surface Reclamation:

- After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations or roads. The road will be reclaimed as directed by the BLM. The well site



will be properly contoured, as close as possible, to the original topography. Topsoil from the spoil pile will be placed over the distributed area. Revegetation procedures will comply with BLM standards.

- The location and road will be rehabilitated as recommended by the BLM.
- If the well is deemed commercially productive, caliche from areas of the drill pad not required for *safe* operations, will be removed. These unused areas of the drill pad will be contoured as close as possible to match the original topography. The original topsoil will be returned to the area of the drilling pad not necessary to operate the well. These areas will then be seeded per BLM requirements.
- See attached site reclamation diagram for more details.

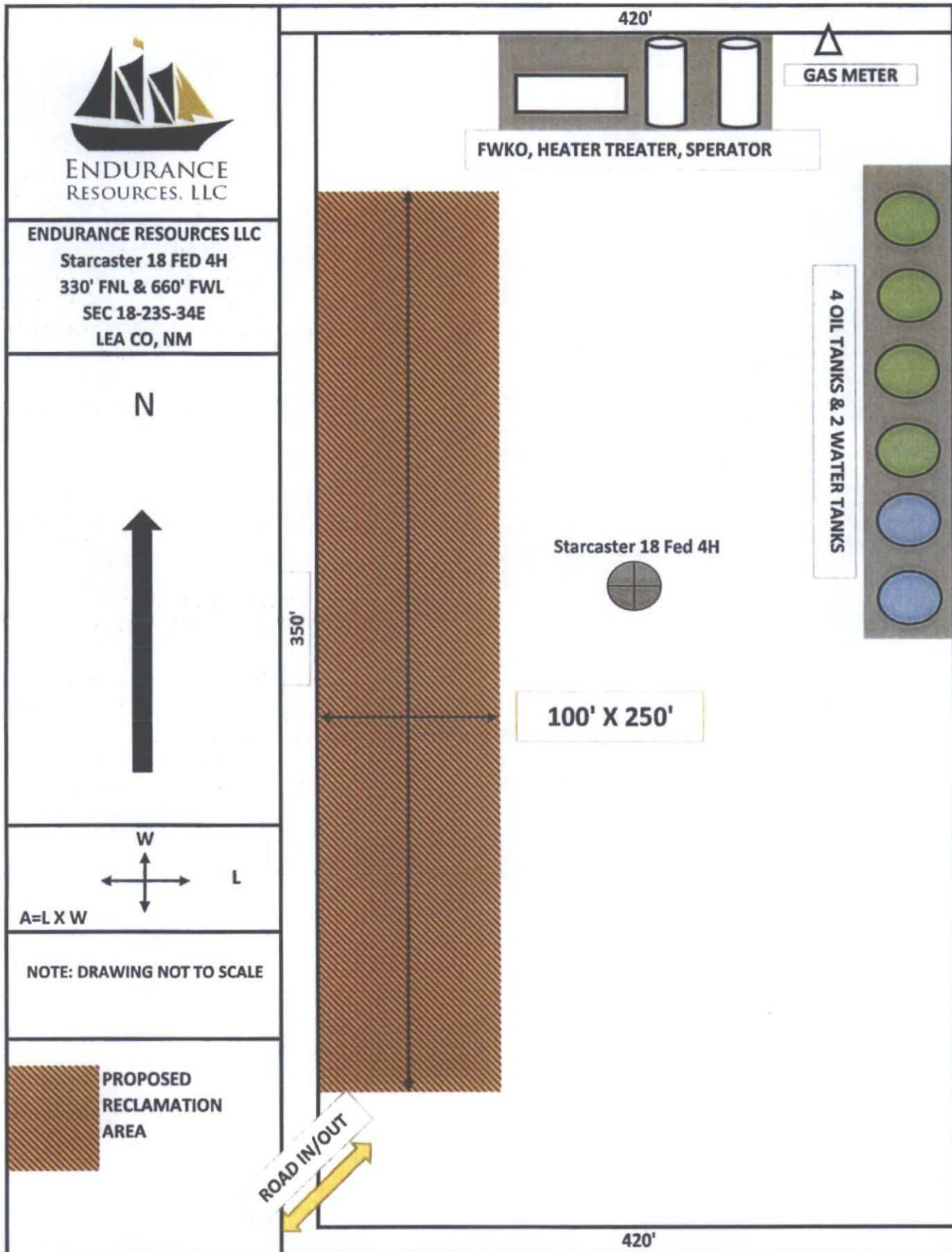
11. Surface Ownership:

- The surface is owned by Limestone Livestock, LLC and we are currently in negotiations for a surface use agreement. The surface is multiple use with primary uses of the region for the grazing of livestock, as well as oil & gas production.

12. Other Information:

- The area surrounding the well site is made up of grassland & mesquite trees. The topsoil is packed soils and sand. No wildlife was observed, but free range cattle, deer, dove/quail, & small rodents are likely to traverse the area.
- There is no permanent or live water in the general proximity of this location.
- There are no dwellings within 1 mile of this location.
- A two well pad for the SG 12 Fed #1H & 2H was determined by onsite with Trish Badbear 7/31/13. Due to a dunal complex to the north, it was determined that this well site would be properly placed as to not disturb the existing dunal complex in this area.

PROPOSED INTERIM SITE RECLAMATION





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Operators Representative:

Endurance Resources LLC representatives responsible for ensuring compliance of the surface use plan are listed below.

John Logemann

Drilling Superintendent

Endurance Resources LLC

203 W. Wall St, Suite 1000

Midland, TX 79705

432.308.0722

Manny Sirgo

VP Operations

Endurance Resources LLC

203 W. Wall St, Suite 1212

Midland, TX 79701

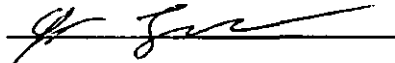
432.413.0085

Certification:

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in the APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

12/20/2013

Date



John Logemann

Drilling Superintendent

Endurance Resources LLC

john@enduranceresourcesllc.com