Form 3160-5
(August 2007)

HOBBS OCD
OCT 28 2013
RECEIVED

OCD Hobbs

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM104685

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
TAYLOR DRAW 7 FED 1H

2. Name of Operator
DEVON ENERGY PRODUCTION CO.LP

Contact: TRINA C COUCH
Mail: trina.couch@dvn.com

9. API Well No.
30-025-41146

3a. Address
DEVON ENERGY PRODUCTION CO.LP 333 WEST SHERIDAN AVE
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
Ph: 405-228-8203
Fx: 405-552-8113

10. Field and Pool, or Exploratory
LUSK; BONE SPRING

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 7 T19S R32E 1650FSL 200FEL

11. County or Parish, and State
LEA COUNTY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Devon Energy Production Company L.P. respectfully requests approval to change the SHL to the following:

Current location: SHL: 1650 FSL & 200 FEL

TO

Proposed location: SHL: 1650 FSL & 260 FEL

Surface: OK. All approved COAs applies. Individual 10/23/13

Attachments:

Engr. Review 9/25/13 - JAM - COAs updated.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #220241 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO.LP, sent to the Hobbs
Committed to AFMSS for processing by JOHNNY DICKERSON on 09/18/2013 ()

Name *(Printed/Typed)* TRINA C COUCH — Title REGULATORY ASSOCIATE

Signature (Electronic Submission) — Date 09/16/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By /s/ Cody Layton — Title NRS — Date 10/23/13

Conditions of approval, if any, are attached. Approval of this notice 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.

Office CFO

KZ

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

OCT 29 2013

BLM

Additional data for EC transaction #220241 that would not fit on the form

32. Additional remarks, continued

Drilling Plan
Directional Survey
C-102

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 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	[3] Pool Name

[4] Property Code	[5] Property Name	[6] Well Number
	TAYLOR DRAW 7 FEDERAL	1H

[7] OGRID No.	[8] Operator Name	[9] Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.	3618.2

[10] Surface Location

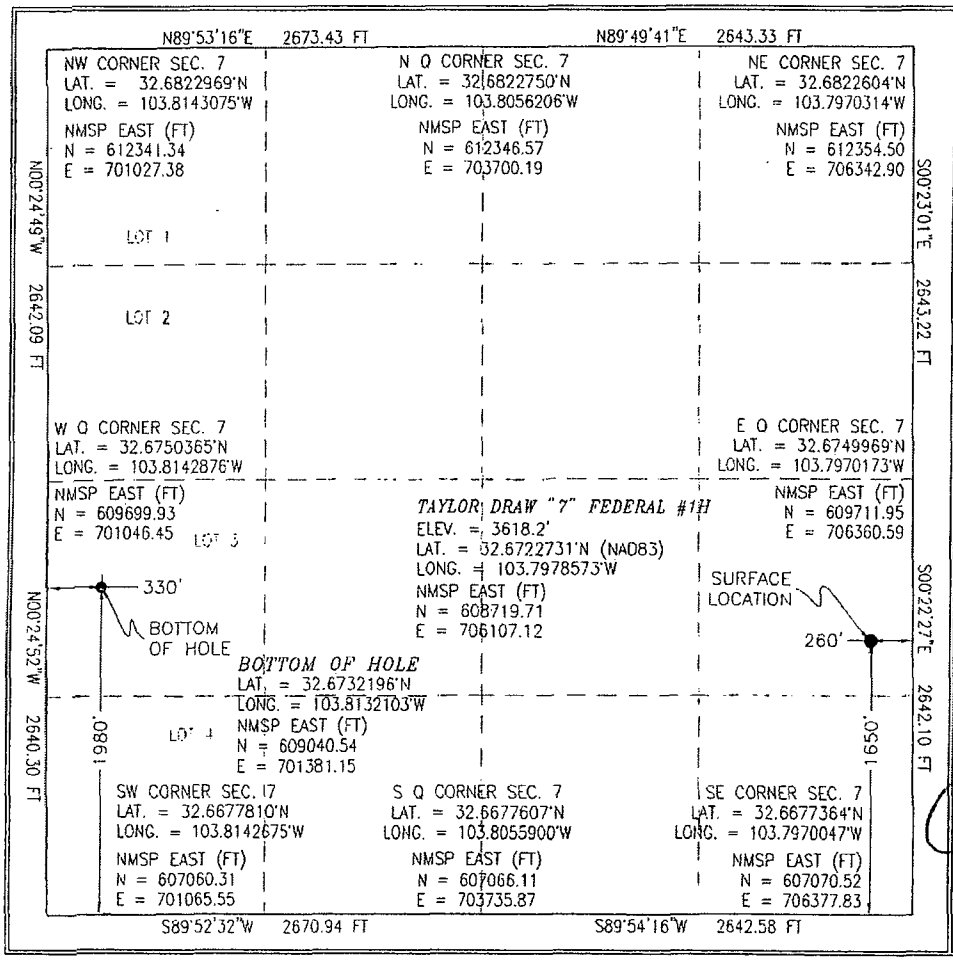
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	7	19 S	32 E		1650	SOUTH	260	EAST	LEA

[11] 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
3	7	19 S	32 E		1980	SOUTH	330	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



[17] 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 unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature Date

Printed Name

E-mail Address

[18] 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.

SEPTEMBER 4, 2013

Date of Survey

Signature and Seal of Professional Surveyor:

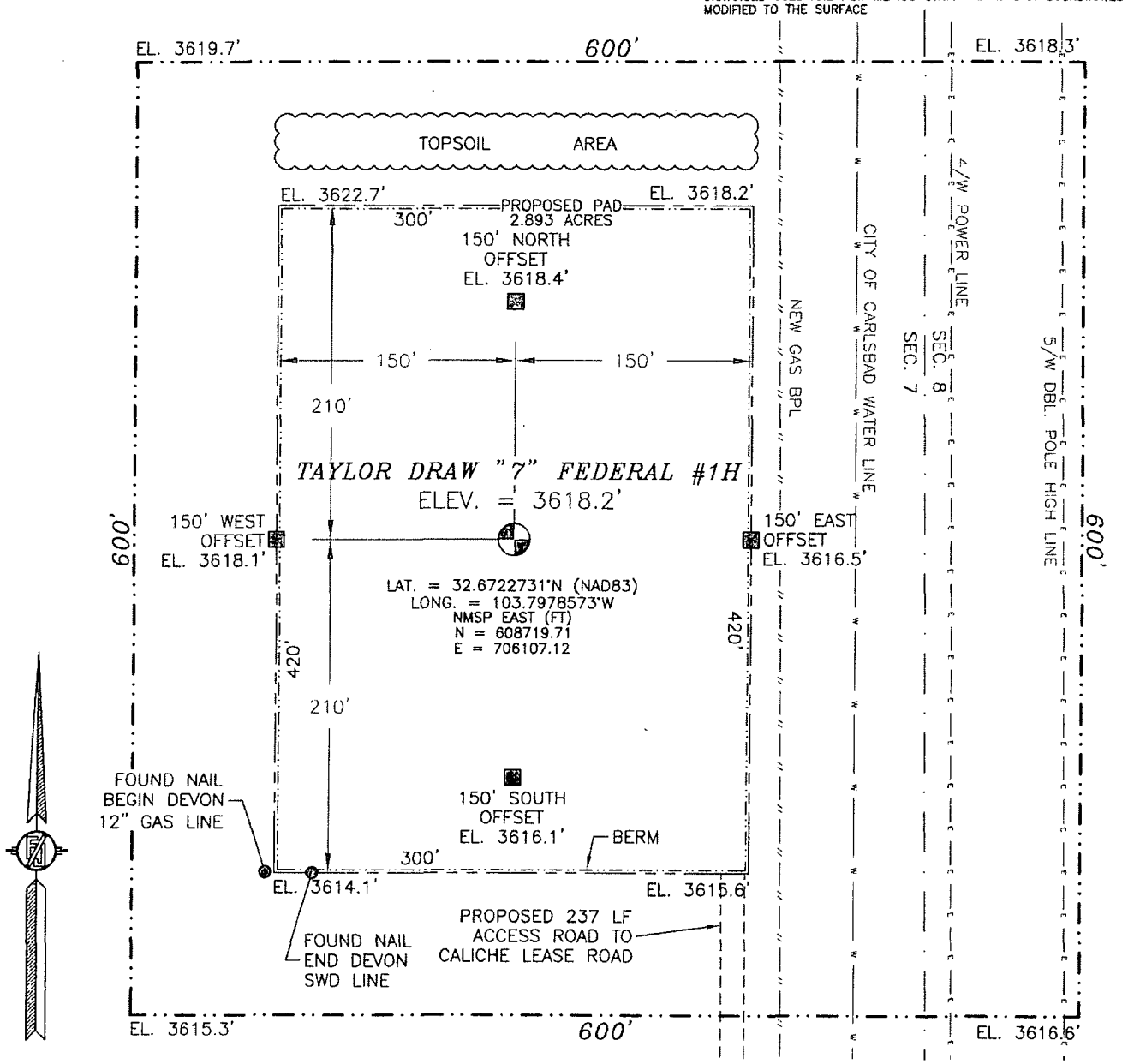
FILIMON F. JARAMILLO
NEW MEXICO
12797
REGISTERED PROFESSIONAL SURVEYOR

Certificate Number: FILIMON F. JARAMILLO, PLS 12797

SURVEY NO. 1382A

SECTION 7, TOWNSHIP 19 SOUTH, RANGE 32 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 CR L126 (MALJAMAR ROAD) AND CR 248 (LUSK PLANT ROAD) GO NORTH ON CR L126 1.5 MILES TURN LEFT ON CALICHE ROAD AND GO SOUTHWEST 328' TO A PROPOSED ROAD SURVEY AND FOLLOW FLAGS NORTH 237' TO THE SOUTHEAST CORNER OF PROPOSED PAD FOR THIS LOCATION.

DEVON ENERGY PRODUCTION COMPANY, L.P.

TAYLOR DRAW "7" FEDERAL #1H

LOCATED 1650 FT. FROM THE SOUTH LINE AND 260 FT. FROM THE EAST LINE OF SECTION 7, TOWNSHIP 19 SOUTH, RANGE 32 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO

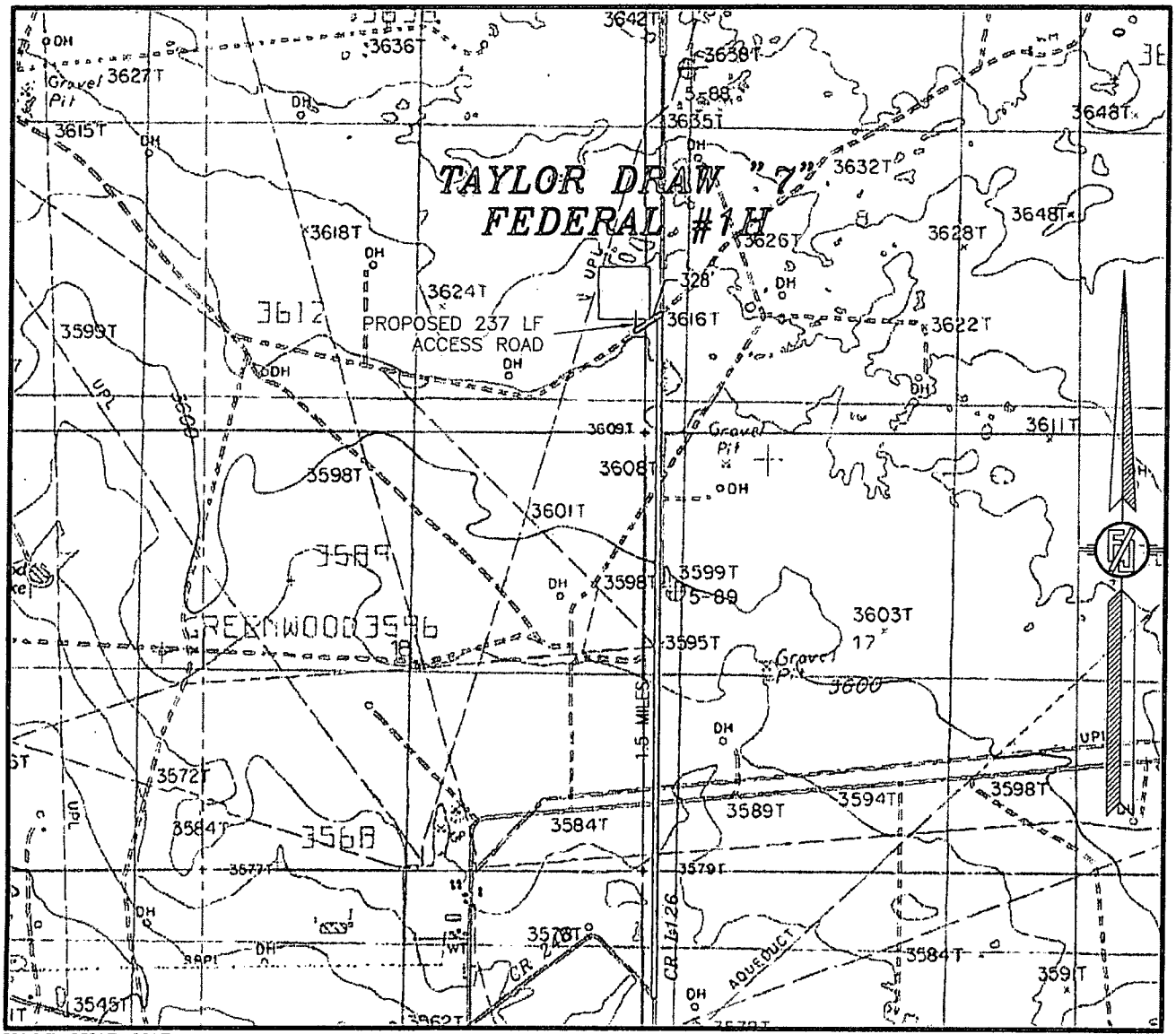
SEPTEMBER 4, 2013

SURVEY NO. 1382A

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

SECTION 7, TOWNSHIP 19 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

LOCATION VERIFICATION MAP



USGS QUAD MAP:
GREENWOOD LAKE

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

TAYLOR DRAW "7" FEDERAL #1H

LOCATED 1650 FT. FROM THE SOUTH LINE
AND 260 FT. FROM THE EAST LINE OF
SECTION 7, TOWNSHIP 19 SOUTH,
RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 4, 2013

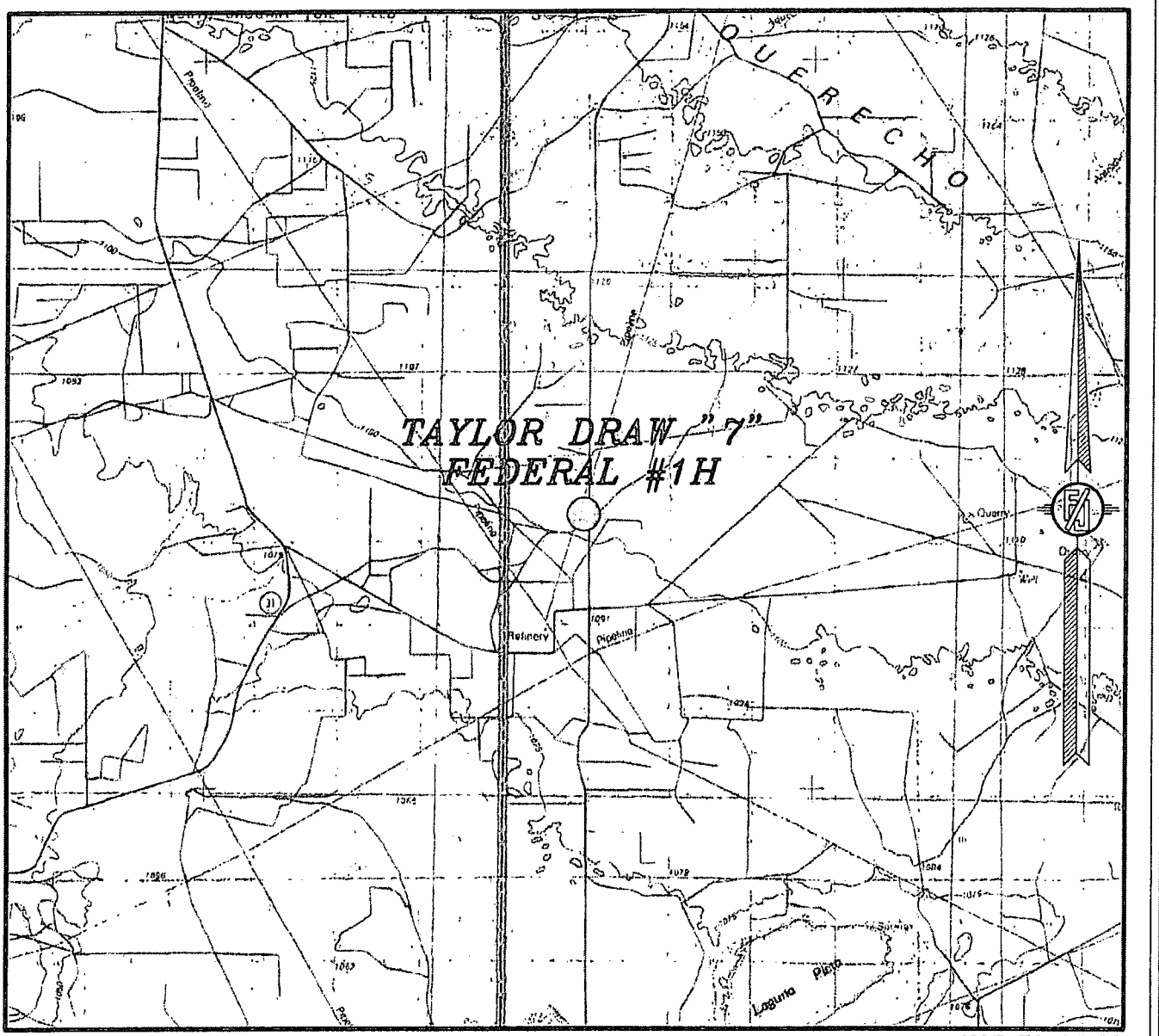
DIRECTIONS TO LOCATION
FROM CR L126 (MALJAMAR ROAD) AND CR 248 (LUSK PLANT ROAD) GO NORTH ON CR L126 1.5 MILES TURN LEFT ON CALICHE ROAD AND GO SOUTHWEST 328' TO A PROPOSED ROAD SURVEY AND FOLLOW FLAGS NORTH 237' TO THE SOUTHEAST CORNER OF PROPOSED PAD FOR THIS LOCATION.

SURVEY NO. 1382A

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

SECTION 7, TOWNSHIP 19 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

VICINITY MAP



NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

TAYLOR DRAW "7" FEDERAL #1H

LOCATED 1650 FT. FROM THE SOUTH LINE
AND 260 FT. FROM THE EAST LINE OF
SECTION 7, TOWNSHIP 19 SOUTH,
RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

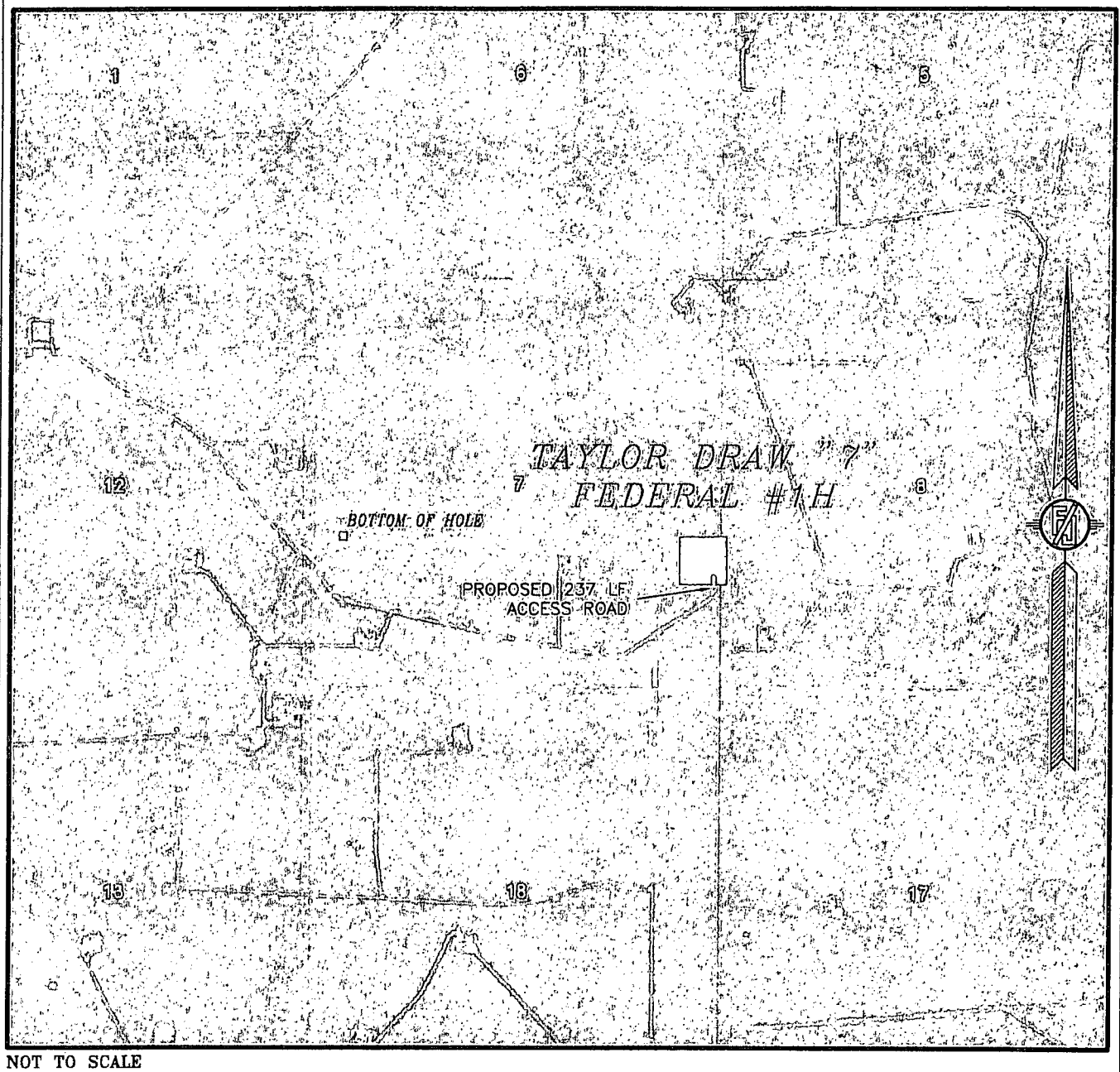
SEPTEMBER 4, 2013

SURVEY NO. 1382A

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

SECTION 7, TOWNSHIP 19 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
MARCH 2012

DEVON ENERGY PRODUCTION COMPANY, L.P.

TAYLOR DRAW "7" FEDERAL #1H

LOCATED 1650 FT. FROM THE SOUTH LINE
AND 260 FT. FROM THE EAST LINE OF
SECTION 7, TOWNSHIP 19 SOUTH,
RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SEPTEMBER 4, 2013

SURVEY NO. 1382A

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

Taylor Draw 7 Fed 1H – APD DRILLING PLAN
KKS 1-07-2013
KKS 4-16-13 revised intermediate casing depth to 4,525', casing design factors & cement volume
AAA 9-13-13 revised plat for surface change; request new directional well plans and updated depths; replace 5-1/2" LTC with 5-1/2" BTC; updated casing design factors & cement volumes

Casing Program

See COA

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
17-1/2"	0 – ~~1,025~~ 960'	13-3/8"	0 – 1,025	48#	STC	H-40
12-1/4"	~~1,025~~ – 4,525	9-5/8"	0 – 4,525	40#	LTC	HCK-55
8-3/4"	4,525 – 13,944	5-1/2"	0 – 13,944	17#	BTC	HCP-110

Note: only new casing will be utilized

MAXIMUM TVD in lateral: 9315'

Design Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
13-3/8", 48#, H-40, ST&C	1.61	3.61	6.54
9-5/8", 40#, HCK-55 LT&C	1.80	1.68	3.48
5-1/2" 17# HCP-110 BTC	1.69	2.41	6.34

Mud Program:

See COA

Depth 960'	Mud Wt.	Visc.	Fluid Loss	Type System
0 – ~~1,025~~	8.4 – 9.0	30 – 34	N/C	FW
~~1,025~~ – 4,525	9.8 – 10.0	28 – 32	N/C	Brine
4,525 - 14,711	8.6 – 9.0	28 – 32	N/C-12	FW

Pressure Control Equipment:

The BOP system used to drill the intermediate hole will consist of a 13-5/8" Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2, a 3M system will be installed and tested prior to drilling out the surface casing shoe.

The BOP system used to drill the production hole will consist of a 13-5/8" Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 a 3M system will be installed prior to drilling out the intermediate casing shoe.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line); **if an H&P rig drills this well. Otherwise no flex line is needed.** The line will be kept as straight as possible with minimal turns.

Cementing Program (cement volumes based on at least 100 % excess on Surface, 50% excess on Intermediate 25% excess on Production)

13-3/8" Surface	**Lead**: 500 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water, 13.5 ppg **Yield:** 1.75 cf/sk **TOC @ surface** **Tail**: 515 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg **Yield:** 1.35 cf/sk
9-5/8" Intermediate	**Lead**: 900 sacks (65:35) Class C Cement:Poz (Fly Ash): + 5% bwow Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 6% bwoc Bentonite + 70.9% Fresh Water, 12.9 ppg **Yield**: 1.85 cf/sk **TOC @ surface** **1000 ft.Tail**: 360 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Water, 14.8 ppg **Yield**: 1.33 cf/sk
5-1/2" Production	**Lead** **Lead:** 446 sacks Tuned Lite Class C Cement: HR-601 + 13.54 Gal/sk Fresh Water, 10.2 ppg **Yield**: 2.91 cf/sk **Tail**: 1484 sacks (50:50) Class H Cement:Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water, 14.5 ppg **Yield**: 1.22 cf/sk **TOC @ 4025 ft**

ACTUAL CEMENT VOLUMES WILL BE ADJUSTED BASED ON FLUID CALIPER AND CALIPER LOG DATA.

devon

Project: Lea County (NAD83)
Site: Taylor Draw 7 Fed
Well: #1H
OH
Plan 2

Azimuths to Grid North
True North: -0.29°
Magnetic North: 7.24°

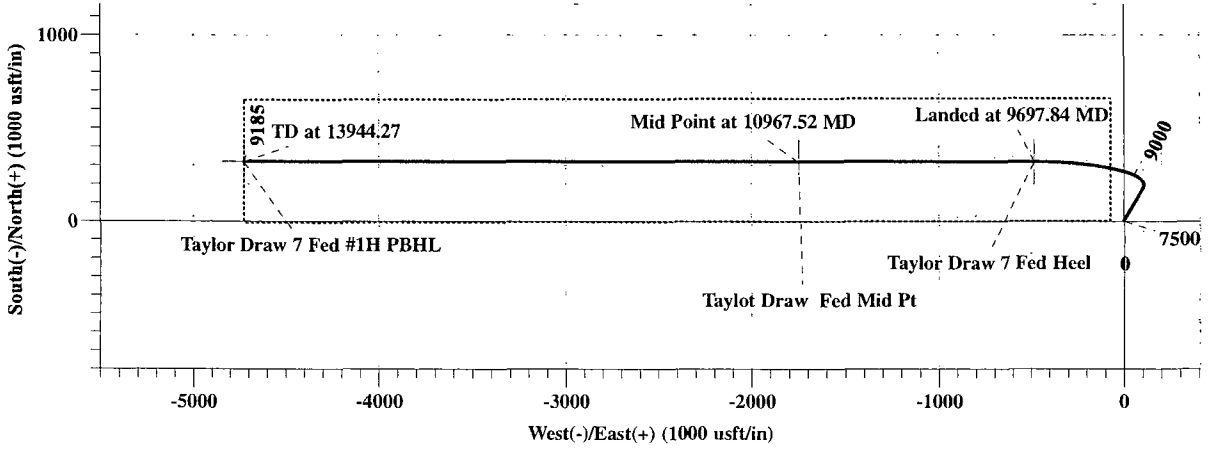
Magnetic Field
Strength: 48704.5snT
Dip Angle: 60.52°
Date: 1/3/2013
Model: IGRF2010

PATHFINDER
A Schlumberger Company

WELL DETAILS: #1H

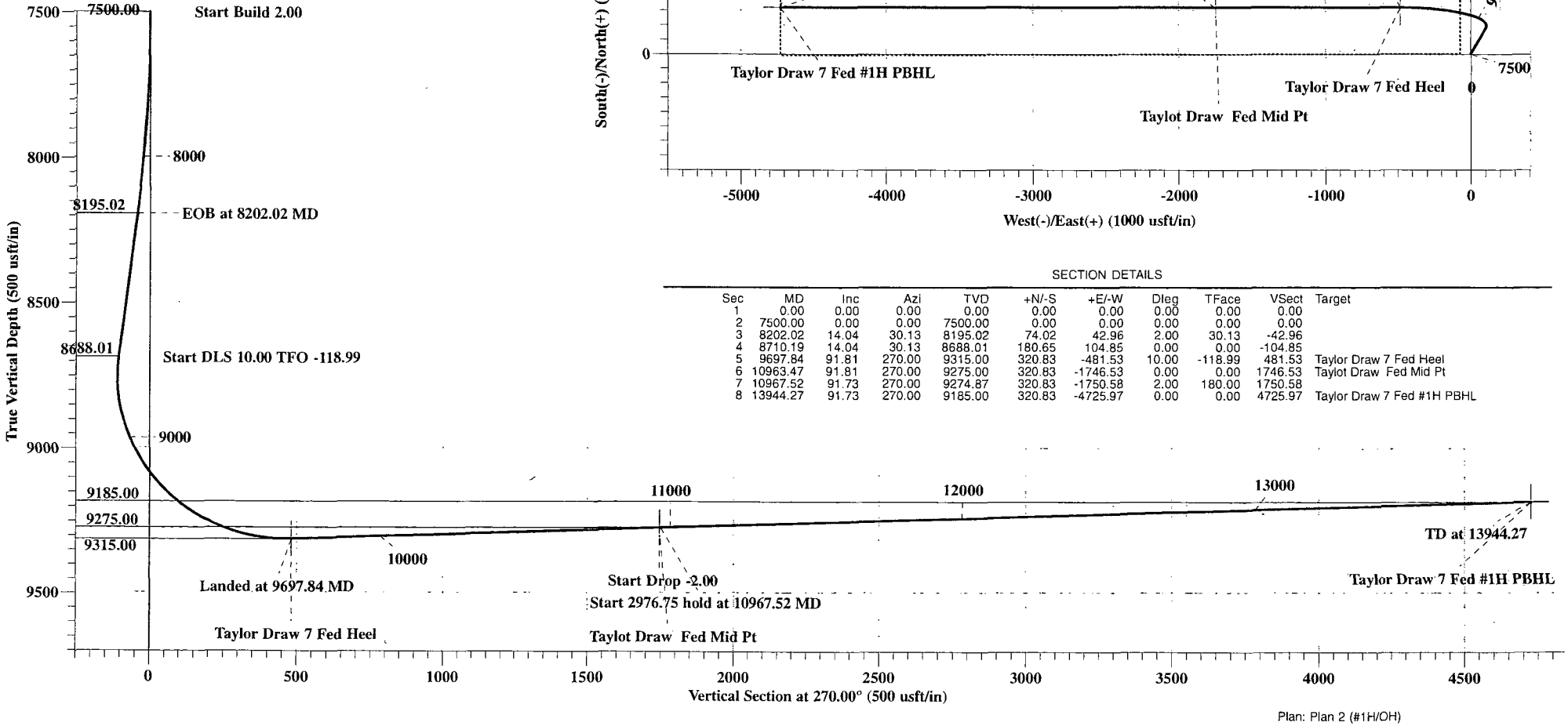
Est RKB = 20' @ 3636.80usft 3616.80

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	608719.71	706107.12	32° 40' 20.183 N	103° 47' 52.286 W



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	7500.00	0.00	0.00	7500.00	0.00	0.00	0.00	0.00	0.00	
3	8202.02	14.04	30.13	8195.02	74.02	42.96	2.00	30.13	-42.96	
4	8710.19	14.04	30.13	8688.01	180.65	104.85	0.00	0.00	-104.85	
5	9697.84	91.81	270.00	9315.00	320.83	-481.53	10.00	-118.99	481.53	Taylor Draw 7 Fed Heel
6	10963.47	91.81	270.00	9275.00	320.83	-1746.53	0.00	0.00	1746.53	Taylot Draw Fed Mid Pt
7	10967.52	91.73	270.00	9274.87	320.83	-1750.58	2.00	180.00	1750.58	
8	13944.27	91.73	270.00	9185.00	320.83	-4725.97	0.00	0.00	4725.97	Taylor Draw 7 Fed #1H PBHL



Plan: Plan 2 (#1H/OH)

Created By: Jenise Kirkpatrick Date: 8:57, September 12 2013

Devon Energy, Inc.

Lea County (NAD83)
Taylor Draw 7 Fed
#1H

OH

Plan: Plan 2

Standard Planning Report

12 September, 2013

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #1H
Company:	Devon Energy, Inc.	**TVD Reference:**	Est RKB = 20' @ 3636.80usft
Project:	Lea County (NAD83)	**MD Reference:**	Est RKB = 20' @ 3636.80usft
Site:	Taylor Draw 7 Fed	**North Reference:**	Grid
Well:	#1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

Project	Lea County (NAD83)		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Taylor Draw 7 Fed				
Site Position:		**Northing:**	608,719.71 usft	**Latitude:**	32° 40' 20.183 N
From:	Map	**Easting:**	706,107.12 usft	**Longitude:**	103° 47' 52.286 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.29 °

Well	#1H				
Well Position	**+N/-S**	0.00 usft	**Northing:**	608,719.71 usft	**Latitude:**	32° 40' 20.183 N
	+E/-W	0.00 usft	**Easting:**	706,107.12 usft	**Longitude:**	103° 47' 52.286 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	3,636.80 usft	**Ground Level:**	3,616.80 usft

Wellbore	OH				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	1/3/2013	7.53	60.52	48,705

Design	Plan 2				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.00	0.00	0.00	270.00

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	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	
8,202.02	14.04	30.13	8,195.02	74.02	42.96	2.00	2.00	0.00	30.13	
8,710.19	14.04	30.13	8,688.01	180.65	104.85	0.00	0.00	0.00	0.00	
9,697.84	91.81	270.00	9,315.00	320.83	-481.53	10.00	7.87	-12.16	-118.99	Taylor Draw 7 Fed He
10,963.47	91.81	270.00	9,275.00	320.83	-1,746.53	0.00	0.00	0.00	0.00	Taylot Draw Fed Mid
10,967.52	91.73	270.00	9,274.88	320.83	-1,750.58	2.00	-2.00	0.00	180.00	
13,944.27	91.73	270.00	9,185.00	320.83	-4,725.97	0.00	0.00	0.00	0.00	Taylor Draw 7 Fed #1I

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #1H
Company:	Devon Energy, Inc.	**TVD Reference:**	Est RKB = 20' @ 3636.80usft
Project:	Lea County (NAD83)	**MD Reference:**	Est RKB = 20' @ 3636.80usft
Site:	Taylor Draw 7 Fed	**North Reference:**	Grid
Well:	#1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

Planned Survey

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)
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	2.00	30.13	7,599.98	1.51	0.88	-0.88	2.00	2.00	0.00
7,700.00	4.00	30.13	7,699.84	6.04	3.50	-3.50	2.00	2.00	0.00
7,800.00	6.00	30.13	7,799.45	13.57	7.88	-7.88	2.00	2.00	0.00
7,900.00	8.00	30.13	7,898.70	24.11	13.99	-13.99	2.00	2.00	0.00
8,000.00	10.00	30.13	7,997.47	37.64	21.85	-21.85	2.00	2.00	0.00
8,100.00	12.00	30.13	8,095.62	54.14	31.42	-31.42	2.00	2.00	0.00
8,200.00	14.00	30.13	8,193.06	73.60	42.72	-42.72	2.00	2.00	0.00
8,202.02	14.04	30.13	8,195.02	74.02	42.96	-42.96	2.00	2.00	0.00
8,300.00	14.04	30.13	8,290.07	94.58	54.89	-54.89	0.00	0.00	0.00
8,400.00	14.04	30.13	8,387.08	115.56	67.07	-67.07	0.00	0.00	0.00
8,500.00	14.04	30.13	8,484.09	136.55	79.25	-79.25	0.00	0.00	0.00
8,600.00	14.04	30.13	8,581.11	157.53	91.43	-91.43	0.00	0.00	0.00
8,700.00	14.04	30.13	8,678.12	178.51	103.60	-103.60	0.00	0.00	0.00
8,710.19	14.04	30.13	8,688.01	180.65	104.85	-104.85	0.00	0.00	0.00
8,800.00	12.42	350.73	8,775.60	199.65	108.77	-108.77	10.00	-1.80	-43.87
8,900.00	17.13	315.18	8,872.46	220.76	96.62	-96.62	10.00	4.71	-35.55
9,000.00	25.09	298.02	8,965.76	241.22	67.44	-67.44	10.00	7.96	-17.16
9,100.00	34.10	289.10	9,052.66	260.40	22.13	-22.13	10.00	9.00	-8.92
9,200.00	43.50	283.62	9,130.54	277.73	-37.96	37.96	10.00	9.40	-5.48
9,300.00	53.08	279.78	9,197.01	292.66	-110.98	110.98	10.00	9.58	-3.84
9,400.00	62.76	276.81	9,250.07	304.76	-194.73	194.73	10.00	9.68	-2.97
9,500.00	72.49	274.32	9,288.10	313.65	-286.65	286.65	10.00	9.73	-2.49
9,600.00	82.25	272.09	9,309.94	319.06	-383.95	383.95	10.00	9.76	-2.23
9,697.84	91.81	270.00	9,315.00	320.83	-481.53	481.53	10.00	9.77	-2.13
9,700.00	91.81	270.00	9,314.93	320.83	-483.69	483.69	0.00	0.00	0.00
9,800.00	91.81	270.00	9,311.77	320.83	-583.64	583.64	0.00	0.00	0.00
9,900.00	91.81	270.00	9,308.61	320.83	-683.59	683.59	0.00	0.00	0.00
10,000.00	91.81	270.00	9,305.45	320.83	-783.54	783.54	0.00	0.00	0.00
10,100.00	91.81	270.00	9,302.29	320.83	-883.49	883.49	0.00	0.00	0.00
10,200.00	91.81	270.00	9,299.13	320.83	-983.44	983.44	0.00	0.00	0.00
10,300.00	91.81	270.00	9,295.97	320.83	-1,083.39	1,083.39	0.00	0.00	0.00
10,400.00	91.81	270.00	9,292.81	320.83	-1,183.34	1,183.34	0.00	0.00	0.00
10,500.00	91.81	270.00	9,289.65	320.83	-1,283.29	1,283.29	0.00	0.00	0.00
10,600.00	91.81	270.00	9,286.49	320.83	-1,383.24	1,383.24	0.00	0.00	0.00
10,700.00	91.81	270.00	9,283.33	320.83	-1,483.19	1,483.19	0.00	0.00	0.00
10,800.00	91.81	270.00	9,280.17	320.83	-1,583.14	1,583.14	0.00	0.00	0.00
10,900.00	91.81	270.00	9,277.01	320.83	-1,683.09	1,683.09	0.00	0.00	0.00
10,963.47	91.81	270.00	9,275.00	320.83	-1,746.53	1,746.53	0.00	0.00	0.00
10,967.52	91.73	270.00	9,274.88	320.83	-1,750.58	1,750.58	2.00	-2.00	0.00
11,000.00	91.73	270.00	9,273.89	320.83	-1,783.04	1,783.04	0.00	0.00	0.00
11,100.00	91.73	270.00	9,270.88	320.83	-1,882.99	1,882.99	0.00	0.00	0.00
11,200.00	91.73	270.00	9,267.86	320.83	-1,982.95	1,982.95	0.00	0.00	0.00
11,300.00	91.73	270.00	9,264.84	320.83	-2,082.90	2,082.90	0.00	0.00	0.00
11,400.00	91.73	270.00	9,261.82	320.83	-2,182.86	2,182.86	0.00	0.00	0.00
11,500.00	91.73	270.00	9,258.80	320.83	-2,282.81	2,282.81	0.00	0.00	0.00
11,600.00	91.73	270.00	9,255.78	320.83	-2,382.77	2,382.77	0.00	0.00	0.00
11,700.00	91.73	270.00	9,252.76	320.83	-2,482.72	2,482.72	0.00	0.00	0.00
11,800.00	91.73	270.00	9,249.74	320.83	-2,582.67	2,582.67	0.00	0.00	0.00
11,900.00	91.73	270.00	9,246.72	320.83	-2,682.63	2,682.63	0.00	0.00	0.00
12,000.00	91.73	270.00	9,243.70	320.83	-2,782.58	2,782.58	0.00	0.00	0.00
12,100.00	91.73	270.00	9,240.68	320.83	-2,882.54	2,882.54	0.00	0.00	0.00
12,200.00	91.73	270.00	9,237.66	320.83	-2,982.49	2,982.49	0.00	0.00	0.00
12,300.00	91.73	270.00	9,234.64	320.83	-3,082.45	3,082.45	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #1H
Company:	Devon Energy, Inc.	**TVD Reference:**	Est RKB = 20' @ 3636.80usft
Project:	Lea County (NAD83)	**MD Reference:**	Est RKB = 20' @ 3636.80usft
Site:	Taylor Draw 7 Fed	**North Reference:**	Grid
Well:	#1H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 2		

Planned Survey

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)
12,400.00	91.73	270.00	9,231.63	320.83	-3,182.40	3,182.40	0.00	0.00	0.00
12,500.00	91.73	270.00	9,228.61	320.83	-3,282.36	3,282.36	0.00	0.00	0.00
12,600.00	91.73	270.00	9,225.59	320.83	-3,382.31	3,382.31	0.00	0.00	0.00
12,700.00	91.73	270.00	9,222.57	320.83	-3,482.26	3,482.26	0.00	0.00	0.00
12,800.00	91.73	270.00	9,219.55	320.83	-3,582.22	3,582.22	0.00	0.00	0.00
12,900.00	91.73	270.00	9,216.53	320.83	-3,682.17	3,682.17	0.00	0.00	0.00
13,000.00	91.73	270.00	9,213.51	320.83	-3,782.13	3,782.13	0.00	0.00	0.00
13,100.00	91.73	270.00	9,210.49	320.83	-3,882.08	3,882.08	0.00	0.00	0.00
13,200.00	91.73	270.00	9,207.47	320.83	-3,982.04	3,982.04	0.00	0.00	0.00
13,300.00	91.73	270.00	9,204.45	320.83	-4,081.99	4,081.99	0.00	0.00	0.00
13,400.00	91.73	270.00	9,201.43	320.83	-4,181.95	4,181.95	0.00	0.00	0.00
13,500.00	91.73	270.00	9,198.41	320.83	-4,281.90	4,281.90	0.00	0.00	0.00
13,600.00	91.73	270.00	9,195.39	320.83	-4,381.85	4,381.85	0.00	0.00	0.00
13,700.00	91.73	270.00	9,192.38	320.83	-4,481.81	4,481.81	0.00	0.00	0.00
13,800.00	91.73	270.00	9,189.36	320.83	-4,581.76	4,581.76	0.00	0.00	0.00
13,900.00	91.73	270.00	9,186.34	320.83	-4,681.72	4,681.72	0.00	0.00	0.00
13,944.27	91.73	270.00	9,185.00	320.83	-4,725.97	4,725.97	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Taylor Draw 7 Fed #1H F - plan hits target center - Point	0.00	0.00	9,185.00	320.83	-4,725.97	609,040.54	701,381.15	32° 40' 23.590 N	103° 48' 47.557 W
Taylot Draw Fed Mid Pt - plan hits target center - Point	0.00	0.00	9,275.00	320.83	-1,746.53	609,040.54	704,360.59	32° 40' 23.445 N	103° 48' 12.700 W
Taylor Draw 7 Fed Heel - plan hits target center - Point	0.00	0.00	9,315.00	320.83	-481.53	609,040.54	705,625.59	32° 40' 23.382 N	103° 47' 57.901 W

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Devon Energy Production Company, L.P.**
LEASE NO.:	**NMNM-104685**
WELL NAME & NO.:	**Taylor Draw 7 Fed 1H**
SURFACE HOLE FOOTAGE:	**1650' FSL & 0260' FEL**
BOTTOM HOLE FOOTAGE	**1980' FSL & 0330' FWL**
LOCATION:	**Section 7, T. 19 S., R 32 E., NMPM**
COUNTY:	**Lea County, New Mexico**
API:	**30-025-41146**

The original COAs still stand with the following drilling modifications:

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ **Lea County**
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. **A Hydrogen Sulfide (H2S) Drilling Plan shall be activated prior to drilling out the surface shoe. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possibility of water and brine flows in the Salado and Delaware Mountain Groups. Possibility of lost circulation in the Rustler, Capitan, and Delaware Mountain Groups.

1. The **13-3/8** inch surface casing shall be set at approximately **960** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **In this area of the proposed well, a salt zone often appears about 45 feet below the base of the Magenta, avoid this layer. If salt is encountered, set casing at least 25 feet above the salt.**

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Special Capitan Reef requirements:

If any lost circulation occurs below the Base of the Salt, the operator shall do the following:

- **Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.**

- **Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.**

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement should tie-back at least **50 feet above the Capitan Reef**. Operator shall provide method of verification. **Excess calculates to 24% - Additional cement may be required.**

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

   a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

   a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

   b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

   c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.

   d. The results of the test shall be reported to the appropriate BLM office.

   e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

   f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JAM 092313