

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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.

HOBBSOCD

MAR 30 2015

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

RECEIVED

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMNM112941
2. Name of Operator DEVON ENERGY PRODUCTION CO		6. If Indian, Allottee or Tribe Name
3a. Address 333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 73102		7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 405-552-7848		8. Well Name and No. COBBER 21 FED 1H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 21 T26S R34E SESE 65FSL 660FEL 32.021870 N Lat, 103.468410 W Lon		9. API Well No. 30-025-42311-00-X1
		10. Field and Pool, or Exploratory BRADLEY
		11. County or Parish, and State LEA 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 Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

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 recompleat 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 recompleat 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 Co., L.P. respectfully requests approval to changed the approved bottom hole location from: 330 FNL & 660 FEL, Unit A, sec. 21, T26S, R34E to 330 FNL & 330 FEL, Unit A, sec. 21, T26S, R34E due to re-evaluation of geology.

Please see the attached revised C-102, Drill Plan and directional survey.

Note: Due to BHL change, Pool Code & Pool Name has been changed from Bradley; Bone Spring, 7280 to WC-025 g-06 S263407P; UPR BONE SPRING, 97892.

COAs from EC # 293845 still stand

14. I hereby certify that the foregoing is true and correct. Electronic Submission #296076 verified by the BLM Well Information System For DEVON ENERGY PRODUCTION CO LP, sent to the Hobbs Committed to AFMS for processing by JENNIFER SANCHEZ on 03/26/2015 (15JAS0019SE)	
Name (Printed/Typed) DAVID H COOK	Title REGULATORY SPECIALIST
Signature (Electronic Submission)	Date 03/25/2015
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By _____	Title _____
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 _____	
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.	

APPROVED

MAR 26 2015

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

MAR 31 2015

Ke

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-i02
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-42311	² Pool Code 97892	³ Pool Name WC-025 G-06 S263407P; UPR BONE SPRING
⁴ Property Code 313933	⁵ Property Name COBBER 21 FED	⁶ Well Number 1H
⁷ GRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3286.0

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
P	21	26 S	34 E		65	SOUTH	660	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
A	21	26 S	34 E		330	NORTH	330	EAST	LEA

¹² Dedicated Acres 160	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.

N89°27'52"E 2649.93 FT NW CORNER SEC. 21 LAT. = 32.0361753°N LONG. = 103.4833609°W NMSP EAST (FT) N = 377935.32 E = 804719.56 N Q CORNER SEC. 21 LAT. = 32.0361857°N LONG. = 103.4748110°W NMSP EAST (FT) N = 377960.09 E = 807363.98 NE CORNER SEC. 21 LAT. = 32.0361926°N LONG. = 103.4662911°W NMSP EAST (FT) N = 577983.66 E = 810009.13 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. W Q CORNER SEC. 21 LAT. = 32.0289285°N LONG. = 103.4833553°W NMSP EAST (FT) N = 375299.07 E = 804742.06 SW CORNER SEC. 21 LAT. = 32.0216677°N LONG. = 103.4833474°W NMSP EAST (FT) N = 372657.71 E = 804765.29 S Q CORNER SEC. 21 LAT. = 32.0216813°N LONG. = 103.4748145°W NMSP EAST (FT) N = 372683.53 E = 807409.84 SE CORNER SEC. 21 LAT. = 32.0216943°N LONG. = 103.4662802°W NMSP EAST (FT) N = 372709.41 E = 810054.84 COBBER "21" FED 1H ELEV. = 3286.0 LAT. = 32.0218699°N (NAD83) LONG. = 103.4684096°W NMSP EAST (FT) N = 372767.99 E = 809394.37 BOTTOM OF HOLE LAT. = 32.0352848°N LONG. = 103.4673554°W NMSP EAST (FT) N = 377650.78 E = 809681.98 E Q CORNER SEC. 21 LAT. = 32.0289466°N LONG. = 103.4662875°W NMSP EAST (FT) N = 375347.67 E = 810031.41 SURFACE LOCATION		" 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: <i>[Signature]</i> Date: 3/24/2015 Printed Name: David H. Cook E-mail Address: david.cook@dm.com "SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of a duly sworn surveyor by me or under my supervision, and that the same are true and correct to the best of my belief. MARCH 20, 2015 Date of Survey: 3/23/2015 Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number: PLIMON T. JARAMILLO, PLS 12797 SURVEY NO. 2895A
--	--	--

PP: 65 FSL & 660 FEL

DRILLING PROGRAM

Devon Energy Production Company, L.P.
Cobber 21 Fed 1H

1. **Geologic Name of Surface Formation:** Quaternary Alluvium
2. **Estimated Tops of Geological Markers & Depths of Anticipated FW, Oil, or Gas:**

a. Fresh Water	200'	
b. Rustler	960'	Barren
c. Top of Salt	1100'	Barren
d. Castile	3460'	Barren
e. Base of Salt	5042'	Barren
f. Delaware	5296'	Oil / Gas
g. Bell Canyon	5332'	Oil / Gas
h. Cherry Canyon	6340'	Oil / Gas
i. Brushy Canyon	7945'	Oil / Gas
j. Bone Spring	9546'	Oil / Gas
k. Upper Leonard Shale	9561'	Oil / Gas
l. Upper Leonard Shale Base	9861'	Oil / Gas
m. 1 st Bone Spring Sand	10586'	Oil / Gas
Total Depths	9,711' TVD	14,395' MD PH: 10,800' TVD

3. **Pressure Control Equipment:**

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

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.

Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

4. Casing Program:

Hole Size	Hole Interval	Casing OD	Casing Interval	Weight (lb/ft)	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17-1/2"	0 - 1000'	13-3/8"	0 - 1000'	48	STC	H-40	1.72	3.87	11.27
12-1/4"	1000-5300'	9-5/8"	0-5300'	40	BTC	HCK-55	1.53	1.43	4.37
8-3/4"	5300-14395'	7"	0-9000'	29	BTC	P-110	2.57	1.27	2.76
		5-1/2"	9000'-14395'	17	BTC	P-110	1.78	2.20	3.31

Casing Notes:

- All casing is new and API approved

Maximum Lateral TVD: 10,800'

5. Proposed mud Circulations System:

Depth	Mud Weight	Viscosity	Fluid Loss	Type System
0-1000'	8.4-8.6	30-34	N/C	FW
1000-5300'	10	28-32	N/C	Brine
5300-14395'	8.6-9.2	28-32	N/C	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

6. Cementing Table:

String	Number of sx	Weight lbs/gal	Water Volume g/sx	Yield cf/sx	Stage; Lead/Tail	Slurry Description
13-3/8" Surface Casing	410	13.5	9.08	1.72	Lead	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.1% Fresh Water
	560	14.8	6.34	1.33	Tail	Class C Cement + 63.5% Fresh Water
9-5/8" Intermediate Casing	1190	12.9	9.82	1.85	Lead	(65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water
	430	14.8	6.32	1.33	Tail	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water
5-1/2" Production Casing Tuned	570	11	14.94	2.66	Lead	Tuned Light® Cement + 0.125 lb/sk Pol-E-Flake + 76.5% Fresh Water
	1360	14.5	5.31	1.20	Tail	(50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.25% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water

Pilot Hole Plug Back

Plug top	Plug Bottom	% Excess	No. Sacks	Wt. lb/gal	Yld. ft ³ /sack	Water gal/sk	Slurry Description and Cement Type
9033	10800	10	685	15.6	1.19	5.42	Class H + 0.5% BWOC HR-601 + 0.2% Halad-9

TOC for all Strings:

Surface @ 0'
 Intermediate @ 0'
 Production @ 4800'

Notes:

- Cement volumes Surface 100%, Intermediate 50%, Production based on at least 25% excess
- Actual cement volumes will be adjusted based on fluid caliper and/or caliper log data

devon

Cobber 21 Fed 1H
Lea Co, NM



Weatherford

Plan Data for Cobber 21 Fed 1H Lat

Plan Point Information:
Dogleg Severity Unit: */100.00ft Position offsets from Slot centre

MD	Inc	Az	TVD	+N/-S	+E/-W	Northing	Easting	VSec	DLS
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(DLSU)
9233.54	0.00	0.00	9233.54	0.00	0.00	372767.99	809394.37	0.00	0.00
9983.54	90.00	3.08	9711.00	476.78	25.64	373244.77	809420.01	476.78	12.00
14395.64	90.00	3.08	9711.00	4882.51	262.61	377650.50	809656.98	4882.51	0.00

Plan Data for Cobber 21 Fed 1H Lat

Slot: Cobber 21 Fed 1H
Position:
Offset is from Site centre
 +N/-S: 0.00USft Northing: 372767.99USft Latitude: 32°1'18.7"
 +E/-W: 0.00USft Easting: 809394.37USft Longitude: -103°28'6.3"
 Elevation Above VRD: 3286.00USft

Plan Data for Cobber 21 Fed 1H Lat

Target Set Information:
Name: Cobber 21 Fed 1H
Position offsets from Slot centre

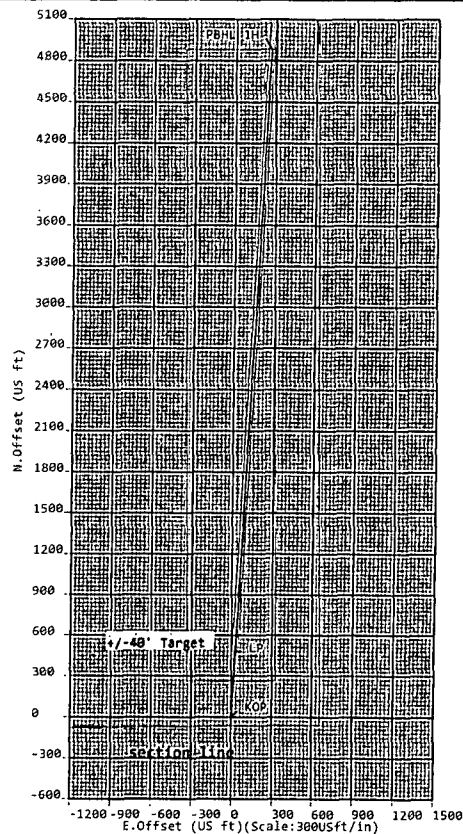
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape	Comment
(USft)	(USft)	(USft)	(USft)	(USft)	(USft)		
PBHL	9711.00	4882.51	262.61	377650.50	809656.98	Cuboid	

Plan Data for Cobber 21 Fed 1H Lat

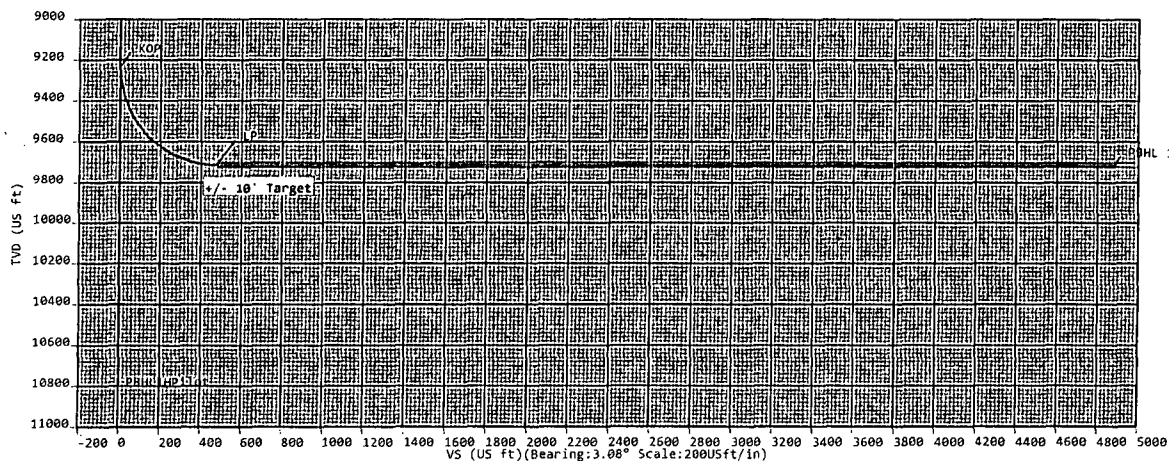
Well: Cobber 21 Fed 1H Lat
Type: Side-Track
File Number:
Plan Folder: P1 Plan: P1:V4
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft Azimuth: 0.00°
+E/-W: 0.00USft
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
86GM 48095(nT) 7.23° 59.91° 2015-04-15

Cobber 21 Fed 1H Lat

Cobber 21 Fed 1H Pilot



K8-3311
GL-3286



Sign Off: Russell Joyner

5D Plan Report**Devon Energy****Field Name:** *Lea Co, NM Nad 83 NMEZ***Site Name:** *Cobber 21 Fed 1H***Well Name:** *Cobber 21 Fed 1H Lat***Plan:** *P1:V4*

24 March 2015



Cobber 21 Fed 1H Lat

Field Name Lea Co, NM Nad 83 NMEZ	Map Units : US ft		Company Name : Devon Energy	
	Vertical Reference Datum (VRD) : Mean Sea Level			
	Projected Coordinate System : NAD83 /-New Mexico East (ftUS)			
Comment :				
Site Name Cobber 21 Fed 1H	Units : US ft	North Reference : Grid	Convergence Angle : 0.46	
	Position	Northing : 372767.99 US ft	Latitude : 32° 1' 18.73"	
		Easting : 809394.37 US ft	Longitude : -103° 28' 6.27"	
	Elevation above Mean Sea Level: 3286.00 US ft			
Comment :				
Slot Name Cobber 21 Fed 1H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.00 US ft	Northing : 372767.99 US ft	Latitude : 32° 1' 18.73"	
	+E / -W : 0.00 US ft	Easting : 809394.37 US ft	Longitude : -103° 28' 6.27"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3286.00 US ft				
Comment :				
Well Name Cobber 21 Fed 1H Lat	Type : Sidetrack		UWI :	Plan : P1:V4
	Parent : Cobber 21 Fed 1H Pilot		Tie Point Method : MD	Tie Point : 9233.54 US ft
	Rig Height <i>Kelly Bushing</i> : 25.00 US ft		Comment :	
	Relative to Mean Sea Level: 3311.00 US ft			
	Closure Distance : 4889.57 US ft		Closure Azimuth : 3.07874°	
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az : 3.08°
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48095.7nT	Dec : 7.23°	Dip : 59.91°
				Date : 15/Apr/2015

Target Set

Name : Cobber 21 Fed 1H **Number of Targets :** 1

Comment :

Target Name: PBHL Shape: Cuboid	Position (Relative to Slot centre)			
	+N / -S : 4882.51 US ft	Northing : 377650.50 US ft	Latitude : 32° 2' 7.02"	
	+E / -W : 262.61 US ft	Easting : 809656.98 US ft	Longitude : -103° 28' 2.77"	
	TVD (Kelly Bushing) : 9711.00 US ft			
Orientation Azimuth : 3.08°		Inclination : 0.00°		
Dimensions Length : 8805.00 US ft	Breadth : 40.00 US ft	Height : 20.00 US ft		

Well path created using minimum curvature

5D Plan Report

Salient Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
ID (US ft)	Inc (°)	Az (°)	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	B. Rate (%/100 US ft)	T. Rate (%/100 US ft)	T. Face (°)	Comments
9233.54	0.00	0.00	9233.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
9983.54	90.00	3.08	9711.00	476.78	25.64	477.47	12.00	12.00	0.00	3.08	LP
14395.64	90.00	3.08	9711.00	4882.51	262.61	4889.57	0.00	0.00	0.00	0.00	PBHL 1H

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
ID (US ft)	Inc (°)	Az (°)	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)		Comments
9200.00	0.00	0.00	9200.00	0.00	0.00	0.00	0.00	372767.99	809394.37		
9233.54	0.00	0.00	9233.54	0.00	0.00	0.00	0.00	372767.99	809394.37		KOP
9300.00	7.98	3.08	9299.79	4.61	0.25	4.62	12.00	372772.60	809394.62		
9400.00	19.98	3.08	9396.65	28.68	1.54	28.72	12.00	372796.67	809395.91		
9500.00	31.98	3.08	9486.38	72.34	3.89	72.44	12.00	372840.33	809398.26		
9600.00	43.98	3.08	9565.07	133.67	7.19	133.86	12.00	372901.66	809401.56		
9700.00	55.98	3.08	9629.26	210.00	11.29	210.30	12.00	372977.99	809405.66		
9800.00	67.98	3.08	9676.16	297.98	16.03	298.41	12.00	373065.97	809410.40		
9900.00	79.98	3.08	9703.72	393.78	21.18	394.35	12.00	373161.77	809415.55		
9983.54	90.00	3.08	9711.00	476.78	25.64	477.47	12.00	373244.77	809420.01		LP
10000.00	90.00	3.08	9711.00	493.21	26.53	493.92	0.00	373261.20	809420.90		
10100.00	90.00	3.08	9711.00	593.07	31.90	593.92	0.00	373361.06	809426.27		
10200.00	90.00	3.08	9711.00	692.92	37.27	693.92	0.00	373460.91	809431.64		
10300.00	90.00	3.08	9711.00	792.78	42.64	793.92	0.00	373560.77	809437.01		
10400.00	90.00	3.08	9711.00	892.63	48.01	893.92	0.00	373660.62	809442.38		
10500.00	90.00	3.08	9711.00	992.49	53.38	993.92	0.00	373760.48	809447.75		
10600.00	90.00	3.08	9711.00	1092.35	58.75	1093.92	0.00	373860.34	809453.12		
10700.00	90.00	3.08	9711.00	1192.20	64.12	1193.92	0.00	373960.19	809458.49		
10800.00	90.00	3.08	9711.00	1292.06	69.49	1293.92	0.00	374060.05	809463.86		
10900.00	90.00	3.08	9711.00	1391.91	74.87	1393.92	0.00	374159.90	809469.24		
11000.00	90.00	3.08	9711.00	1491.77	80.24	1493.92	0.00	374259.76	809474.61		
11100.00	90.00	3.08	9711.00	1591.62	85.61	1593.92	0.00	374359.61	809479.98		
11200.00	90.00	3.08	9711.00	1691.48	90.98	1693.92	0.00	374459.47	809485.35		
11300.00	90.00	3.08	9711.00	1791.34	96.35	1793.92	0.00	374559.33	809490.72		
11400.00	90.00	3.08	9711.00	1891.19	101.72	1893.92	0.00	374659.18	809496.09		
11500.00	90.00	3.08	9711.00	1991.05	107.09	1993.92	0.00	374759.04	809501.46		
11600.00	90.00	3.08	9711.00	2090.90	112.46	2093.92	0.00	374858.89	809506.83		
11700.00	90.00	3.08	9711.00	2190.76	117.83	2193.92	0.00	374958.75	809512.20		
11800.00	90.00	3.08	9711.00	2290.61	123.20	2293.92	0.00	375058.60	809517.57		
11900.00	90.00	3.08	9711.00	2390.47	128.57	2393.92	0.00	375158.46	809522.94		
12000.00	90.00	3.08	9711.00	2490.33	133.94	2493.92	0.00	375258.32	809528.31		
12100.00	90.00	3.08	9711.00	2590.18	139.32	2593.92	0.00	375358.17	809533.69		
12200.00	90.00	3.08	9711.00	2690.04	144.69	2693.92	0.00	375458.03	809539.06		
12300.00	90.00	3.08	9711.00	2789.89	150.06	2793.92	0.00	375557.88	809544.43		
12400.00	90.00	3.08	9711.00	2889.75	155.43	2893.92	0.00	375657.74	809549.80		
12500.00	90.00	3.08	9711.00	2989.60	160.80	2993.92	0.00	375757.59	809555.17		
12600.00	90.00	3.08	9711.00	3089.46	166.17	3093.92	0.00	375857.45	809560.54		
12700.00	90.00	3.08	9711.00	3189.31	171.54	3193.92	0.00	375957.30	809565.91		
12800.00	90.00	3.08	9711.00	3289.17	176.91	3293.92	0.00	376057.16	809571.28		
12900.00	90.00	3.08	9711.00	3389.03	182.28	3393.92	0.00	376157.02	809576.65		
13000.00	90.00	3.08	9711.00	3488.88	187.65	3493.92	0.00	376256.87	809582.02		
13100.00	90.00	3.08	9711.00	3588.74	193.02	3593.92	0.00	376356.73	809587.39		
13200.00	90.00	3.08	9711.00	3688.59	198.39	3693.92	0.00	376456.58	809592.76		
13300.00	90.00	3.08	9711.00	3788.45	203.76	3793.92	0.00	376556.44	809598.13		
13400.00	90.00	3.08	9711.00	3888.30	209.14	3893.92	0.00	376656.29	809603.51		
13500.00	90.00	3.08	9711.00	3988.16	214.51	3993.92	0.00	376756.15	809608.88		
13600.00	90.00	3.08	9711.00	4088.02	219.88	4093.92	0.00	376856.01	809614.25		
13700.00	90.00	3.08	9711.00	4187.87	225.25	4193.92	0.00	376955.86	809619.62		
13800.00	90.00	3.08	9711.00	4287.73	230.62	4293.92	0.00	377055.72	809624.99		
13900.00	90.00	3.08	9711.00	4387.58	235.99	4393.92	0.00	377155.57	809630.36		
14000.00	90.00	3.08	9711.00	4487.44	241.36	4493.92	0.00	377255.43	809635.73		
14100.00	90.00	3.08	9711.00	4587.29	246.73	4593.92	0.00	377355.28	809641.10		

SD Plan Report

Interpolated Points (Relative to Slot centre - TVD relative to Kelly Bushing)										
MD (US ft)	Incl (°)	Az (°)	TVD (US ft)	N Offset (US ft)	E Offset (US ft)	VS (US ft)	SP Dis (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
14200.00	90.00	3.08	9711.00	4687.15	252.10	4693.92	0.00	377455.14	809646.47	
14300.00	90.00	3.08	9711.00	4787.01	257.47	4793.92	0.00	377555.00	809651.84	
14395.64	90.00	3.08	9711.00	4882.51	262.61	4889.57	0.00	377650.50	809656.98	PBHL 1H

**Weatherford**

Weatherford Drilling Services

GeoDec4 v2.1.0.0

Report Date: February 25, 2015
Job Number: _____
Customer: Devon Energy
Well Name: Cobber 21 Fed 1H
API Number: _____
Rig Name: _____
Location: Lea Co, NM Nad83 NME
Block: _____
Engineer: RWJ

NAD83 / New Mexico East (ftUS)	NAD83 (1986)
Projected Coordinate System	Geodetic Coordinate System
Datum: North American Datum 1983 (1986)	Datum: North American Datum 1983 (1986)
Ellipsoid: GRS 1980	Ellipsoid: GRS 1980
EPSG: 2257	EPSG: 4269
North: 372767.99 US Survey Foot	Latitude: 32.02187 Degree
East: 809394.37 US Survey Foot	Longitude: -103.46841 Degree
Convergence: 0.46°	
Declination: 7.23°	
Total Correction: 6.77°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation = 0 m
Latitude = 32° 01' 18.73" N
Longitude = 103° 28' 06.27" W

Magnetic Declination = 7.23 deg	[True North Offset]
Local Gravity = .9988 g	Checksum = 6801
Local Field Strength = 48096 nT	Magnetic Vector X = 23921 nT
Magnetic Dip = 59.91 deg	Magnetic Vector Y = 3033 nT
Magnetic Model = bggm2014.dat	Magnetic Vector Z = 41615 nT
Run Date = April 15, 2015	Magnetic Vector H = 24112 nT

Signed: _____ Date: _____

© 2013 Weatherford

Warning: This information is controlled, and any printed version is deemed as uncontrolled unless suitably endorsed by a controlling authority or accompanied by a controlled table of contents in order to ensure adequate revision control.