Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

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.
NMNM055493

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:
HADAR 10 FED COM 3H

2. Name of Operator
DEVON ENERGY PRODUCTION CO LP
Contact: TAMI SHIPLEY
Mail: tami.laird@dvn.com

9. API Well No.
30-015-42357-00-X1

3a. Address
333 WEST SHERIDAN AVE
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
Ph: 405-228-2816

10. Field and Pool, or Exploratory
LUSK

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 10 T19S R31E NWSW 2155FSL 0005FWL
32.673629 N Lat, 103.865760 W Lon

11. County or Parish, and State
EDDY 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	
	☐ 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. would like to deepen the pilot hole for the subject well and move the lateral 290' north. Please see attached documents. Thank you.

NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 22 2015
RECEIVED

Accepted for record
NMOCD
6/23/2015

Original COAs Still Stand.

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

Electronic Submission #304760 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO LP, sent to the Carlsbad
Committed to AFMSS for processing by JENNIFER SANCHEZ on 06/12/2015 (15JAS0397SE)

Name *(Printed/Typed)* TAMI SHIPLEY — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 06/12/2015

APPROVED
JUN 12 2015
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By — Title — Date

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.

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

Sundry Request: Hadar 10 Fed Com 3H (API No: 30-015-42357)
AAA 6-11-2015: Change Surface Setting Depth, Pilot Hole Depth, and Bottom-Hole Location

Sundry Request:
Devon Energy Production Company, L.P. also requests deepening the TD of the pilot hole from 9,426' to 10,150' in order to evaluate the 3rd Bone Spring sand potential. We are also moving the lateral 290' to the north side of the production box (2270' FSL) to allow space for the Hadar 10 Fed Com 22H. There was no appreciable change in the measured depth on the approved APD, so those cement volumes for the production casing were not recalculated.

Please find the cementing information to abandon the deeper pilot hole and the updated directional well plan.

Cementing Table:

String	Number of sx	Weight lbs/gal	Water Volume g/sx	Yield cf/sx	Stage; Lead/Tail	Slurry Description
8-3/4" X Whipstock	805	15.6	5.21	1.18	Lead	Premium Plus H Cement + 0.005% bwoc Static Free + 0.3% bwoc R-3 + 0.005 gps FP-6L + 46.3% Fresh Water

TOC for Pilot Hole Abandonment:
8-3/4" Pilot Hole @ 8,179'

Notes:
- An 8-3/4" pilot hole will be drilled to 10,150 ft and plugged back to 8179' (300' above the whipstock at KOP)
- Actual cement volumes will be adjusted based on fluid caliper and caliper log data

devon

Hadar 10 Fed Com 3H
Eddy Co, NM

Weatherford

Plan Data for Hadar 10 Fed Com 3H Lat

Plan Point Information:
DogLeg Severity Unit: °/100.00ft Position offsets from Slot centre

MD (USft)	Inc (°)	Az (°)	TVD (USft)	+N/-S (USft)	+E/-W (USft)	Northing (USft)	Easting (USft)	VSec (USft)	DLS (DLSU)
8479.50	0.00	0.00	8479.50	0.00	0.00	609114.35	685210.40	0.00	0.00
8661.32	20.00	45.80	8657.65	21.90	22.52	609136.25	685232.92	22.66	11.00
9340.73	88.99	89.64	9038.48	119.21	517.75	609233.56	685728.15	518.49	11.00
11378.79	88.99	89.64	9074.57	131.86	2555.45	609246.21	687765.85	2556.23	0.00
11417.53	89.76	89.64	9074.99	132.10	2594.19	609246.45	687804.59	2594.97	2.00
13805.26	89.76	89.64	9084.99	147.12	4981.85	609261.47	690192.25	4982.68	0.00

Plan Data for Hadar 10 Fed Com 3H Lat

Target Set Information:
Name: Hadar 10 Fed Com 3H
Position offsets from Slot centre

Name	TVD (USft)	+N/-S (USft)	+E/-W (USft)	Northing (USft)	Easting (USft)	Shape	Comment
LP Tgt	9035.00	117.49	324.25	609231.84	685534.65	Cuboid	
Mid Pt	9075.00	132.08	2594.20	609246.43	687804.60	Cuboid	
PBHL 3H	9085.00	147.10	4981.86	609261.45	690192.26	Cuboid	

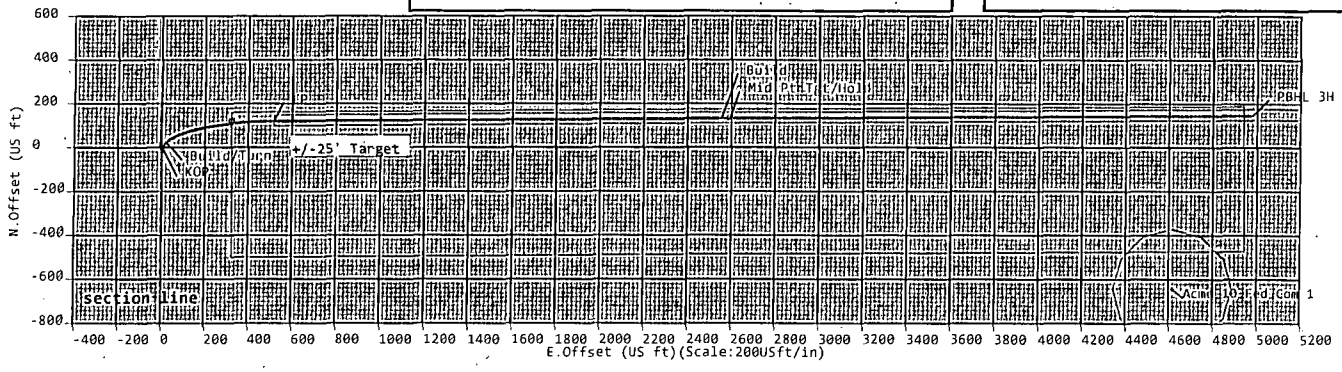
Plan Data for Hadar 10 Fed Com 3H Lat

Slot: Hadar 10 Fed Com 3H
Position:
Offset is from Site centre
+N/-S: 0.00USft Northing: 609114.35USft Latitude: 32°40'25.1"
+E/-W: 0.00USft Easting: 685210.40USft Longitude: -103°51'56.7"
Elevation Above VRD: 3570.00USft

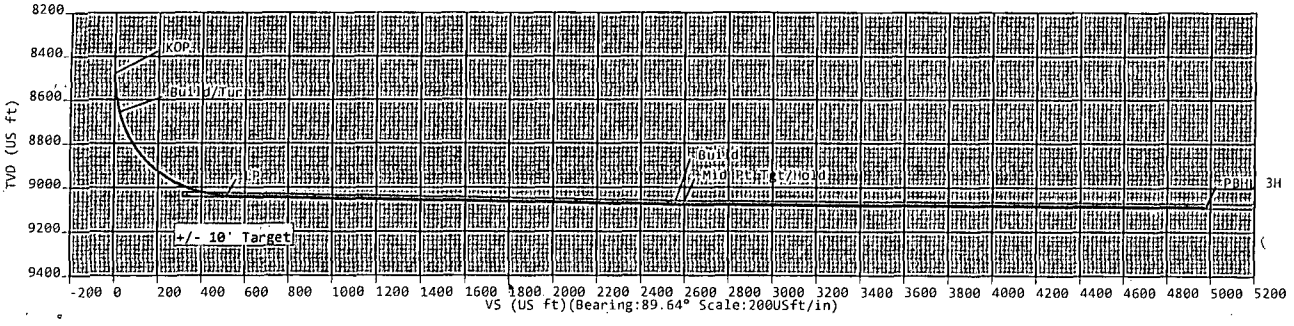
Plan Data for Hadar 10 Fed Com 3H Lat

Well: Hadar 10 Fed Com 3H 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: 89.64°
+E/-W: 0.00USft
Magnetic Parameters:

Model:	Field Strength:	Declination:	Dip:	Date:
BGGM	48476(nT)	7.43°	60.50°	2015-07-15



Hadar 10 Fed Com 3H Lat
Hadar 10 Fed Com 3H Pilot
Exist. Acme 10 Fed Com 1



Sign Off: Russell Joyner

5D Plan Report

Devon Energy

Field Name: *Eddy Co, NM (Nad 83 NME)*
Site Name: *Hadar 10 Fed Com 3H*
Well Name: *Hadar 10 Fed Com 3H Lat*
Plan: *P1:V4*

03 June 2015

Weatherford®

Hadar 10 Fed Com 3H Lat

Field Name
Eddy Co, NM (Nad 83 NME)

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
Hadar 10 Fed Com 3H

Units : US ft **North Reference** : Grid **Convergence Angle :** 0.25

Position **Northing :** 609114.35 US ft **Latitude :** 32°40'25.07"
Easting : 685210.40 US ft **Longitude :** -103°51'56.74"

Elevation above Mean Sea Level: 3570.00 US ft
Comment :

Slot Name
Hadar 10 Fed Com 3H

Position (Offsets relative to Site Centre)
+N / -S : 0.00 US ft **Northing :** 609114.35 US ft **Latitude :** 32°40'25.07"
+E / -W : 0.00 US ft **Easting :** 685210.40 US ft **Longitude :** -103°51'56.74"

Slot TVD Reference : Ground Elevation
Elevation above Mean Sea Level : 3570.00 US ft
Comment :

Well Name
Hadar 10 Fed Com 3H Lat

Type : Sidetrack **UWI :** **Plan :** P1:V4
Parent : Hadar 10 Fed Com 3H Pilot **Tie Point Method :** MD **Tie Point :** 8479.50 US ft
Rig Height *Drill Floor* : 25.00 US ft **Comment :**
Relative to Mean Sea Level: 3595.00 US ft
Closure Distance : 4984.02 US ft **Closure Azimuth :** 88.3085°
Vertical Section (Position of Origin Relative to Slot)
+N / -S : 0.00 US ft **+E / -W :** 0.00 US ft **Az :** 89.64°
Magnetic Parameters
Model : BGGM **Field Strength :** 48476.2nT **Dec :** 7.43° **Dip :** 60.50° **Date :** 15/Jul/2015

Target Set

Name : Hadar 10 Fed Com 3H **Number of Targets :** 3

Comment :

Target Name:
LP Tgt

Shape:
Cuboid

Position (Relative to Slot centre)
+N / -S : 117.49 US ft **Northing :** 609231.84 US ft **Latitude :** 32°40'26.21"
+E / -W : 324.25 US ft **Easting :** 685534.65 US ft **Longitude :** -103°51'52.94"
TVD (Drill Floor) : 9035.00 US ft

Orientation **Azimuth :** 0.00° **Inclination :** 0.00°
Dimensions **Length :** 20.00 US ft **Breadth :** 20.00 US ft **Height :** 20.00 US ft

5D Plan Report

Target Name: Mid Pt **Shape:** Cuboid	**Position (Relative to Slot centre)** **+N / -S :** 132.08 US ft **Northing :** 609246.43 US ft **Latitude :** 32°40'26.26" **+E / -W :** 2594.20 US ft **Easting :** 687804.60 US ft **Longitude :** 103°51'26.38" **TVD (Drill Floor) :** 9075.00 US ft **Orientation** **Azimuth :** 0.00° **Inclination :** 0.00° **Dimensions** **Length :** 20.00 US ft **Breadth :** 20.00 US ft **Height :** 20.00 US ft
Target Name: PBHL 3H **Shape:** Cuboid	**Position (Relative to Slot centre)** **+N / -S :** 147.10 US ft **Northing :** 609261.45 US ft **Latitude :** 32°40'26.30" **+E / -W :** 4981.86 US ft **Easting :** 690192.26 US ft **Longitude :** 103°50'58.45" **TVD (Drill Floor) :** 9085.00 US ft **Orientation** **Azimuth :** 89.64° **Inclination :** -0.24° **Dimensions** **Length :** 4924.00 US ft **Breadth :** 50.00 US ft **Height :** 20.00 US ft

Well path created using minimum curvature

Salient Points (Relative to Slot centre, TVD relative to Drill Floor)

MD (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 (°)	Comment
8479.50	0.00	0.00	8479.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP
8661.32	20.00	45.80	8657.65	21.90	22.52	22.66	11.00	11.00	0.00	45.80	Build/Turn
9340.73	88.99	89.64	9038.48	119.21	517.75	518.49	11.00	10.15	6.45	45.88	LP
11378.79	88.99	89.64	9074.57	131.86	2555.45	2556.23	0.00	0.00	0.00	0.00	Build
11417.53	89.76	89.64	9074.99	132.10	2594.19	2594.97	2.00	2.00	-0.01	359.64	Mid Pt Tgt/Hold
13805.26	89.76	89.64	9084.99	147.12	4981.85	4982.68	0.00	0.00	0.00	0.00	PBHL 3H

Interpolated Points (Relative to Slot centre, TVD relative to Drill Floor)

MD (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)	Comment
8479.50	0.00	0.00	8479.50	0.00	0.00	0.00	0.00	609114.35	685210.40	KOP
8579.50	11.00	45.80	8578.89	6.67	6.86	6.90	11.00	609121.02	685217.26	
8661.32	20.00	45.80	8657.65	21.90	22.52	22.66	11.00	609136.25	685232.92	Build/Turn
8679.50	21.44	49.73	8674.65	26.22	27.28	27.45	11.00	609140.57	685237.68	
8779.50	30.45	64.38	8764.57	49.06	64.19	64.50	11.00	609163.41	685274.59	
8879.50	40.39	72.58	8846.01	69.78	118.12	118.56	11.00	609184.13	685328.52	
8979.50	50.71	77.94	8915.96	87.61	187.10	187.64	11.00	609201.96	685397.50	
9079.50	61.22	81.90	8971.87	101.91	268.58	269.21	11.00	609216.26	685478.98	
9179.50	71.81	85.13	9011.67	112.15	359.58	360.27	11.00	609226.50	685569.98	
9279.50	82.46	87.98	9033.91	117.95	456.74	457.47	11.00	609232.30	685667.14	
9340.73	88.99	89.64	9038.48	119.21	517.75	518.49	11.00	609233.56	685728.15	LP
9379.50	88.99	89.64	9039.16	119.45	556.52	557.25	0.00	609233.80	685766.92	
9479.50	88.99	89.64	9040.93	120.07	656.50	657.24	0.00	609234.42	685866.90	
9579.50	88.99	89.64	9042.70	120.69	756.48	757.22	0.00	609235.04	685966.88	
9679.50	88.99	89.64	9044.48	121.32	856.46	857.21	0.00	609235.67	686066.86	
9779.50	88.99	89.64	9046.25	121.94	956.44	957.19	0.00	609236.29	686166.84	
9879.50	88.99	89.64	9048.02	122.56	1056.43	1057.18	0.00	609236.91	686266.83	
9979.50	88.99	89.64	9049.79	123.18	1156.41	1157.16	0.00	609237.53	686366.81	
10079.50	88.99	89.64	9051.56	123.80	1256.39	1257.15	0.00	609238.15	686466.79	
10179.50	88.99	89.64	9053.33	124.42	1356.37	1357.13	0.00	609238.77	686566.77	
10279.50	88.99	89.64	9055.10	125.04	1456.36	1457.11	0.00	609239.39	686666.76	
10379.50	88.99	89.64	9056.87	125.66	1556.34	1557.10	0.00	609240.01	686766.74	
10479.50	88.99	89.64	9058.64	126.28	1656.32	1657.08	0.00	609240.63	686866.72	

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Drill Floor)

MD (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)	Comment
10579.50	88.99	89.64	9060.41	126.90	1756.30	1757.07	0.00	609241.25	686966.70	
10679.50	88.99	89.64	9062.19	127.52	1856.29	1857.05	0.00	609241.87	687066.69	
10779.50	88.99	89.64	9063.96	128.14	1956.27	1957.04	0.00	609242.49	687166.67	
10879.50	88.99	89.64	9065.73	128.76	2056.25	2057.02	0.00	609243.11	687266.65	
10979.50	88.99	89.64	9067.50	129.38	2156.23	2157.00	0.00	609243.73	687366.63	
11079.50	88.99	89.64	9069.27	130.00	2256.22	2256.99	0.00	609244.35	687466.62	
11179.50	88.99	89.64	9071.04	130.62	2356.20	2356.97	0.00	609244.97	687566.60	
11279.50	88.99	89.64	9072.81	131.24	2456.18	2456.96	0.00	609245.59	687666.58	
11378.79	88.99	89.64	9074.57	131.86	2555.45	2556.23	0.00	609246.21	687765.85	Build
11379.50	89.00	89.64	9074.58	131.86	2556.16	2556.94	2.00	609246.21	687766.56	
11417.53	89.76	89.64	9074.99	132.10	2594.19	2594.97	2.00	609246.45	687804.59	Mid Pt Tgt/Hold
11479.50	89.76	89.64	9075.25	132.49	2656.16	2656.94	0.00	609246.84	687866.56	
11579.50	89.76	89.64	9075.67	133.12	2756.16	2756.94	0.00	609247.47	687966.56	
11679.50	89.76	89.64	9076.09	133.75	2856.15	2856.94	0.00	609248.10	688066.55	
11779.50	89.76	89.64	9076.51	134.38	2956.15	2956.94	0.00	609248.73	688166.55	
11879.50	89.76	89.64	9076.93	135.01	3056.15	3056.93	0.00	609249.36	688266.55	
11979.50	89.76	89.64	9077.35	135.63	3156.14	3156.93	0.00	609249.98	688366.54	
12079.50	89.76	89.64	9077.77	136.26	3256.14	3256.93	0.00	609250.61	688466.54	
12179.50	89.76	89.64	9078.19	136.89	3356.14	3356.93	0.00	609251.24	688566.54	
12279.50	89.76	89.64	9078.60	137.52	3456.14	3456.93	0.00	609251.87	688666.54	
12379.50	89.76	89.64	9079.02	138.15	3556.13	3556.93	0.00	609252.50	688766.53	
12479.50	89.76	89.64	9079.44	138.78	3656.13	3656.93	0.00	609253.13	688866.53	
12579.50	89.76	89.64	9079.86	139.41	3756.13	3756.93	0.00	609253.76	688966.53	
12679.50	89.76	89.64	9080.28	140.04	3856.12	3856.93	0.00	609254.39	689066.52	
12779.50	89.76	89.64	9080.70	140.67	3956.12	3956.93	0.00	609255.02	689166.52	
12879.50	89.76	89.64	9081.12	141.30	4056.12	4056.93	0.00	609255.65	689266.52	
12979.50	89.76	89.64	9081.54	141.92	4156.12	4156.92	0.00	609256.27	689366.52	
13079.50	89.76	89.64	9081.95	142.55	4256.11	4256.92	0.00	609256.90	689466.51	
13179.50	89.76	89.64	9082.37	143.18	4356.11	4356.92	0.00	609257.53	689566.51	
13279.50	89.76	89.64	9082.79	143.81	4456.11	4456.92	0.00	609258.16	689666.51	
13379.50	89.76	89.64	9083.21	144.44	4556.10	4556.92	0.00	609258.79	689766.50	
13479.50	89.76	89.64	9083.63	145.07	4656.10	4656.92	0.00	609259.42	689866.50	
13579.50	89.76	89.64	9084.05	145.70	4756.10	4756.92	0.00	609260.05	689966.50	
13679.50	89.76	89.64	9084.47	146.33	4856.10	4856.92	0.00	609260.68	690066.50	
13779.50	89.76	89.64	9084.89	146.96	4956.09	4956.92	0.00	609261.31	690166.49	
13805.26	89.76	89.64	9084.99	147.12	4981.85	4982.68	0.00	609261.47	690192.25	PBHL 3H

5D Anti-Collision Report

Devon Energy

Field Name: *Eddy Co, NM (Nad 83 NME)*
Site Name: *Hadar 10 Fed Com 3H*
Well Name: *Hadar 10 Fed Com 3H Lat*

03 June 2015

Weatherford

[redacted] Hadar 10 Fed Com 3H Lat [redacted]

Field Name
Eddy Co, NM (Nad 83 NME)

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
Hadar 10 Fed Com 3H

Units : US ft
North Reference : Grid
Convergence Angle : 0.25
Position **Northing :** 609114.35 US ft **Latitude :** 32° 40' 25.07"
Easting : 685210.40 US ft **Longitude :** -103° 51' 56.74"
Elevation above Mean Sea Level: 3570.00 US ft
Comment :

Slot Name
Hadar 10 Fed Com 3H

Position (Offsets relative to Site Centre)
+N / -S : 0.00 US ft **Northing :** 609114.35 US ft **Latitude :** 32°40'25.07"
+E / -W : 0.00 US ft **Easting :** 685210.40 US ft **Longitude :** -103°51'56.74"
Slot TVD Reference : Ground Elevation
Elevation above Mean Sea Level : 3570.00 US ft
Comment :

Well Name
Hadar 10 Fed Com 3H Lat

Type : Sidetrack
UWI :
Plan : Working Plan
Parent : Hadar 10 Fed Com 3H Pilot
Tie Point Method : MD
Tie Point : 8479.50 US ft
Rig Height *Drill Floor* : 25.00 US ft **Relative to Mean Sea Level:** 3595.00 US ft
Comment :
Closure Distance : 4984.02 US ft
Closure Azimuth : 88.3085°
Vertical Section (Position of Origin Relative to Slot)
+N / -S : 0.00 US ft **+E / -W :** 0.00 US ft **Az :** 89.64°
Magnetic Parameters
Model : BGGM **Field Strength :** 48476.2nT **Dec :** 7.43° **Dip :** 60.50° **Date :** 15/Jul/2015

Collision / Uncertainty Analysis

Primary Well	Start MD (US ft)	End MD (US ft)	Collision Risk Interval	No. of Std Deviations in Error Computation
Hadar 10 Fed Com 3H Lat (p)	0.00	13805.26	100.00	2

Secondary Well Names

Exist. Acme 10 Fed Com 1 (s)

Anti-Collision Report Terminology

S.Minor, S.Major : Radii of the ellipse of uncertainty at the current location as seen in the along hole direction.
PHI : Angle between high-side vector and semi-minor axis
TVD Spread : Total TVD range of the ellipsoid of uncertainty at the current location
ES : Distance between the extremities of the primary and secondary uncertainty ellipsoids in the direction Cr-Cr
T.Face to Sec : Angle between the Hi-Side vector of the primary well at the current location and line of closest approach between the two wells

Separation factors calculated using Pedal Curve (Independent Uncertainty). Well path created using minimum curvature.

5D Anti-Collision Report

Anti Collision Proximity Summary (TVD relative to Drill Floor)

SF Secondary Well Name	Pri MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
Exist. Acme 10 Fed Com 1 (s)	13458.02	9065.04	9083.54	790.31	391.93	1.98	SF (Lo)

Primary Well : Hadar 10 Fed Com 3H Lat (p) (TVD Relative to Drill Floor; All Azimuth Relative to GRID NORTH)

MD (US ft)	TVD (US ft)	T Face to Sec (°)	S Major (US ft)	S Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
8479.50	8479.50	97.95	18.95	18.95	Exist. Acme 10 Fed Com 1 (s)	4662.94	4391.22	17.16	
8579.50	8578.89	52.76	19.16	18.92	Exist. Acme 10 Fed Com 1 (s)	4657.08	4382.17	16.94	
8679.50	8674.65	50.62	19.38	18.50	Exist. Acme 10 Fed Com 1 (s)	4639.64	4361.63	16.69	
8779.50	8764.57	38.34	19.63	17.92	Exist. Acme 10 Fed Com 1 (s)	4606.51	4325.51	16.39	
8879.50	8846.01	33.15	19.92	16.98	Exist. Acme 10 Fed Com 1 (s)	4556.41	4272.68	16.06	
8979.50	8915.96	31.82	20.36	15.82	Exist. Acme 10 Fed Com 1 (s)	4491.18	4205.04	15.70	
9079.50	8971.87	33.77	20.98	14.64	Exist. Acme 10 Fed Com 1 (s)	4413.21	4125.16	15.32	
9179.50	9011.67	40.56	21.84	13.62	Exist. Acme 10 Fed Com 1 (s)	4325.34	4035.93	14.95	
9279.50	9033.91	59.19	22.96	13.00	Exist. Acme 10 Fed Com 1 (s)	4230.75	3940.55	14.58	
9379.50	9039.16	84.80	24.31	12.98	Exist. Acme 10 Fed Com 1 (s)	4132.93	3842.43	14.23	
9479.50	9040.93	84.93	25.89	13.19	Exist. Acme 10 Fed Com 1 (s)	4034.83	3744.15	13.88	
9579.50	9042.70	85.06	27.63	13.44	Exist. Acme 10 Fed Com 1 (s)	3936.83	3645.95	13.53	
9679.50	9044.48	85.18	29.60	13.72	Exist. Acme 10 Fed Com 1 (s)	3838.93	3547.84	13.19	
9779.50	9046.25	85.31	31.68	14.04	Exist. Acme 10 Fed Com 1 (s)	3741.14	3449.79	12.84	
9879.50	9048.02	85.44	33.85	14.39	Exist. Acme 10 Fed Com 1 (s)	3643.47	3351.83	12.49	
9979.50	9049.79	85.57	36.10	14.76	Exist. Acme 10 Fed Com 1 (s)	3545.93	3253.99	12.15	
10079.50	9051.56	85.70	38.41	15.16	Exist. Acme 10 Fed Com 1 (s)	3448.53	3156.27	11.80	
10179.50	9053.33	85.82	40.78	15.59	Exist. Acme 10 Fed Com 1 (s)	3351.28	3058.69	11.45	
10279.50	9055.10	85.95	43.19	16.03	Exist. Acme 10 Fed Com 1 (s)	3254.20	2961.27	11.11	
10379.50	9056.87	86.08	45.64	16.50	Exist. Acme 10 Fed Com 1 (s)	3157.30	2864.01	10.76	
10479.50	9058.64	86.21	48.13	16.98	Exist. Acme 10 Fed Com 1 (s)	3060.60	2766.81	10.42	
10579.50	9060.41	86.33	50.64	17.48	Exist. Acme 10 Fed Com 1 (s)	2964.11	2669.75	10.07	
10679.50	9062.19	86.46	53.17	18.00	Exist. Acme 10 Fed Com 1 (s)	2867.87	2572.55	9.71	
10779.50	9063.96	86.59	55.73	18.53	Exist. Acme 10 Fed Com 1 (s)	2771.88	2475.58	9.35	
10879.50	9065.73	86.72	58.30	19.05	Exist. Acme 10 Fed Com 1 (s)	2676.20	2378.86	9.00	
10979.50	9067.50	86.85	60.89	19.63	Exist. Acme 10 Fed Com 1 (s)	2580.84	2282.28	8.64	
11079.50	9069.27	86.97	63.50	20.23	Exist. Acme 10 Fed Com 1 (s)	2485.84	2185.95	8.29	
11179.50	9071.04	87.10	66.12	20.81	Exist. Acme 10 Fed Com 1 (s)	2391.24	2090.02	7.94	
11279.50	9072.81	87.23	68.74	21.38	Exist. Acme 10 Fed Com 1 (s)	2297.11	1994.49	7.59	
11379.50	9074.58	87.40	71.37	21.99	Exist. Acme 10 Fed Com 1 (s)	2203.49	1899.35	7.25	
11479.50	9075.25	89.41	74.02	22.60	Exist. Acme 10 Fed Com 1 (s)	2110.44	1804.61	6.90	
11579.50	9075.67	89.44	76.68	23.22	Exist. Acme 10 Fed Com 1 (s)	2018.06	1710.50	6.56	

5D Anti-Collision Report

Primary Well : Hadar 10 Fed Com 3H Lat (p) (TVD Relative to Drill Floor ; All Azimuth Relative to GRID NORTH)									
MD (US ft)	TVD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	Nearest Well	CC (US ft)	ES (US ft)	SF	Risk
11679.50	9076.09	89.47	79.34	23.84	Exist. Acme 10 Fed Com 1 (s)	1926.44	1617.09	6.23	
11779.50	9076.51	89.50	82.00	24.47	Exist. Acme 10 Fed Com 1 (s)	1835.70	1524.43	5.90	
11879.50	9076.93	89.53	84.68	25.10	Exist. Acme 10 Fed Com 1 (s)	1745.96	1431.64	5.55	
11979.50	9077.35	89.56	87.35	25.74	Exist. Acme 10 Fed Com 1 (s)	1657.40	1339.72	5.22	
12079.50	9077.77	89.59	90.03	26.38	Exist. Acme 10 Fed Com 1 (s)	1570.22	1249.07	4.89	
12179.50	9078.19	89.62	92.72	27.02	Exist. Acme 10 Fed Com 1 (s)	1484.65	1159.98	4.57	
12279.50	9078.60	89.65	95.41	27.68	Exist. Acme 10 Fed Com 1 (s)	1401.00	1072.82	4.27	
12379.50	9079.02	89.68	98.10	28.33	Exist. Acme 10 Fed Com 1 (s)	1319.62	986.91	3.97	
12479.50	9079.44	89.71	100.80	28.99	Exist. Acme 10 Fed Com 1 (s)	1240.96	902.60	3.67	
12579.50	9079.86	89.74	103.50	29.65	Exist. Acme 10 Fed Com 1 (s)	1165.59	821.72	3.39	
12679.50	9080.28	89.77	106.21	30.32	Exist. Acme 10 Fed Com 1 (s)	1094.16	744.57	3.13	
12779.50	9080.70	89.80	108.91	30.99	Exist. Acme 10 Fed Com 1 (s)	1027.52	670.55	2.88	
12879.50	9081.12	89.83	111.62	31.66	Exist. Acme 10 Fed Com 1 (s)	966.64	603.45	2.66	
12979.50	9081.54	89.86	114.33	32.33	Exist. Acme 10 Fed Com 1 (s)	912.68	541.46	2.46	
13079.50	9081.95	89.89	117.04	33.01	Exist. Acme 10 Fed Com 1 (s)	866.94	489.33	2.30	
13179.50	9082.37	89.92	119.76	33.69	Exist. Acme 10 Fed Com 1 (s)	830.77	445.31	2.16	
13279.50	9082.79	89.95	122.48	34.37	Exist. Acme 10 Fed Com 1 (s)	805.47	413.95	2.06	
13379.50	9083.21	89.98	125.19	35.05	Exist. Acme 10 Fed Com 1 (s)	792.07	396.73	2.00	
13479.50	9083.63	90.01	127.91	35.74	Exist. Acme 10 Fed Com 1 (s)	791.18	392.66	1.99	SF (Lo)
13579.50	9084.05	90.04	130.64	36.43	Exist. Acme 10 Fed Com 1 (s)	802.85	403.39	2.01	
13679.50	9084.47	90.07	133.36	37.11	Exist. Acme 10 Fed Com 1 (s)	826.54	428.77	2.08	
13779.50	9084.89	90.10	136.08	37.81	Exist. Acme 10 Fed Com 1 (s)	861.25	466.23	2.18	
13805.26	9084.99	90.11	136.78	37.98	Exist. Acme 10 Fed Com 1 (s)	871.83	478.23	2.21	

Secondary Well : Exist. Acme 10 Fed Com 1 (s) (TVD Relative to Drill Floor (Primary) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T.Face to Sec (°)	S.Major (US ft)	S.Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
8479.50	8479.50	8461.00	97.95	252.30	252.30	4662.94	4391.22	17.16	
8579.50	8578.89	8560.39	52.76	255.28	255.28	4657.08	4382.17	16.94	
8679.50	8674.65	8656.15	50.62	258.11	258.11	4639.64	4361.63	16.69	
8779.50	8764.57	8746.07	38.34	260.89	260.89	4606.51	4325.51	16.39	
8879.50	8846.01	8827.51	33.15	263.39	263.39	4556.41	4272.68	16.06	
8979.50	8915.96	8897.46	31.82	265.52	265.52	4491.18	4205.04	15.70	
9079.50	8971.87	8953.37	33.77	267.21	267.21	4413.21	4125.16	15.32	
9179.50	9011.67	8993.17	40.56	268.40	268.40	4325.34	4035.93	14.95	
9279.50	9033.91	9015.41	59.19	269.07	269.07	4230.75	3940.55	14.58	
9379.50	9039.16	9020.66	84.80	269.23	269.23	4132.93	3842.43	14.23	
9479.50	9040.93	9022.43	84.93	269.28	269.28	4034.83	3744.15	13.88	
9579.50	9042.70	9024.20	85.06	269.33	269.33	3936.83	3645.95	13.53	
9679.50	9044.48	9025.98	85.18	269.39	269.39	3838.93	3547.84	13.19	
9779.50	9046.25	9027.75	85.31	269.44	269.44	3741.14	3449.79	12.84	
9879.50	9048.02	9029.52	85.44	269.49	269.49	3643.47	3351.83	12.49	
9979.50	9049.79	9031.29	85.57	269.54	269.54	3545.93	3253.99	12.15	
10079.50	9051.56	9033.06	85.70	269.60	269.60	3448.53	3156.27	11.80	

Secondary Well : Exist. Acme 10 Fed Com 1 (s) (TVD Relative to Drill Floor (Primary)) ; All Azimuth Relative to GRID NORTH)									
Pri MD (US ft)	TVD (US ft)	Sec MD (US ft)	T Face to Sec (°)	S Major (US ft)	S Minor (US ft)	CC (US ft)	ES (US ft)	SF	Risk
10179.50	9053.33	9034.83	85.82	269.65	269.65	3351.28	3058.69	11.45	
10279.50	9055.10	9036.60	85.95	269.70	269.70	3254.20	2961.27	11.11	
10379.50	9056.87	9038.37	86.08	269.76	269.76	3157.30	2864.01	10.76	
10479.50	9058.64	9040.14	86.21	269.81	269.81	3060.60	2766.81	10.42	
10579.50	9060.41	9041.91	86.33	269.86	269.86	2964.11	2669.75	10.07	
10679.50	9062.19	9043.69	86.46	269.91	269.91	2867.87	2572.55	9.71	
10779.50	9063.96	9045.46	86.59	269.97	269.97	2771.88	2475.58	9.35	
10879.50	9065.73	9047.23	86.72	270.02	270.02	2676.20	2378.86	9.00	
10979.50	9067.50	9049.00	86.85	270.07	270.07	2580.84	2282.28	8.64	
11079.50	9069.27	9050.77	86.97	270.13	270.13	2485.84	2185.95	8.29	
11179.50	9071.04	9052.54	87.10	270.18	270.18	2391.24	2090.02	7.94	
11279.50	9072.81	9054.31	87.23	270.23	270.23	2297.11	1994.49	7.59	
11379.50	9074.58	9056.08	87.40	270.28	270.28	2203.49	1899.35	7.25	
11479.50	9075.25	9056.75	89.41	270.30	270.30	2110.44	1804.61	6.90	
11579.50	9075.67	9057.17	89.44	270.32	270.32	2018.06	1710.50	6.56	
11679.50	9076.09	9057.59	89.47	270.33	270.33	1926.44	1617.09	6.23	
11779.50	9076.51	9058.01	89.50	270.34	270.34	1835.70	1524.43	5.90	
11879.50	9076.93	9058.43	89.53	270.35	270.35	1745.96	1431.64	5.55	
11979.50	9077.35	9058.85	89.56	270.37	270.37	1657.40	1339.72	5.22	
12079.50	9077.77	9059.27	89.59	270.38	270.38	1570.22	1249.07	4.89	
12179.50	9078.19	9059.69	89.62	270.39	270.39	1484.65	1159.98	4.57	
12279.50	9078.60	9060.10	89.65	270.40	270.40	1401.00	1072.82	4.27	
12379.50	9079.02	9060.52	89.68	270.42	270.42	1319.62	986.91	3.97	
12479.50	9079.44	9060.94	89.71	270.43	270.43	1240.96	902.60	3.67	
12579.50	9079.86	9061.36	89.74	270.44	270.44	1165.59	821.72	3.39	
12679.50	9080.28	9061.78	89.77	270.45	270.45	1094.16	744.57	3.13	
12779.50	9080.70	9062.20	89.80	270.47	270.47	1027.52	670.55	2.88	
12879.50	9081.12	9062.62	89.83	270.48	270.48	966.64	603.45	2.66	
12979.50	9081.54	9063.04	89.86	270.49	270.49	912.68	541.46	2.46	
13079.50	9081.95	9063.45	89.89	270.50	270.50	866.94	489.33	2.30	
13179.50	9082.37	9063.87	89.92	270.52	270.52	830.77	445.31	2.16	
13279.50	9082.79	9064.29	89.95	270.53	270.53	805.47	413.95	2.06	
13379.50	9083.21	9064.71	89.98	270.54	270.54	792.07	396.73	2.00	
13479.50	9083.63	9065.13	90.01	270.55	270.55	791.18	392.66	1.99	SF (Lo)
13579.50	9084.05	9065.55	90.04	270.57	270.57	802.85	403.39	2.01	
13679.50	9084.47	9065.97	90.07	270.58	270.58	826.54	428.77	2.08	
13779.50	9084.89	9066.39	90.10	270.59	270.59	861.25	466.23	2.18	
13805.26	9084.99	9066.49	90.11	270.59	270.59	871.83	478.23	2.21	

Weatherford

Weatherford Drilling Services

GeoDec4 v2.1.0.0

Report Date:	May 23, 2015
Job Number:	
Customer:	Devon Energy
Well Name:	Hadar 10 Fed Com 3H
API Number:	
Rig Name:	
Location:	Eddy 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: 609114.35 US Survey Foot	Latitude: 32.673629 Degree
East: 685210.40 US Survey Foot	Longitude: -103.865761 Degree
Convergence: 0.25°	
Declination: 7.43°	
Total Correction: 7.18°	
Datum Transformation: none	

Geodetic Location WGS84

MSL Elevation	=	0 m
Latitude	=	32° 40' 25.07" N
Longitude	=	103° 51' 56.74" W

Magnetic Declination	=	7.43 deg	[True North Offset]		
Local Gravity	=	.9988 g	CheckSum	=	6587
Local Field Strength	=	48476 nT	Magnetic Vector X	=	23671 nT
Magnetic Dip	=	60.50 deg	Magnetic Vector Y	=	3086 nT
Magnetic Model	=	bggm2015.dat	Magnetic Vector Z	=	42191 nT
Run Date	=	July 15, 2015	Magnetic Vector H	=	23872 nT

Signed:_____ Date:_____

Hadar 10

Field: Eddy Co, NM (Nad 83 NME)

Map Units:	US ft
Vertical Reference Datum (VRD):	Mean Sea Level
Projected Coordinate System:	NAD83 / New Mexico East (ftUS)

Site: Hadar 10 Fed Com 3H

Company Name:	Devon Energy		
Units:	US ft		
TVD Reference:			
Position:			
	Northing:	609114.35US ft	**Latitude:**
	Easting:	685210.40US ft	**Longitude:**
North Reference:	Grid	**Convergence Angle:** 0.25	
Elevation above Mean Sea Level :	3570.00US ft		
Comment :			

Slot: Hadar 10 Fed Com 3H

Position (Relative to Site centre)			
+N/-S: 0.00US ft	**Northing:**	609114.35US ft	**Latitude:**
+E/-W: 0.00US ft	**Easting:**	685210.40US ft	**Longitude:**
Elevation above Mean Sea Level :	3570.00US ft		
Comment :			

Well: Hadar 10 Fed Com 3H Lat

Type:	Sidetrack		**Rig Height (**
File Number:			
Parent: Hadar 10 Fed Com 3H Pilot	**Tie Point Method:** MD	**Tie Point:** 8479.50 US ft	
Plan Folder:	P1	**Plan:**	P1:V4
Comment: New Prog. Last one had wrong section calls.			
Closure Distance:	4984.02US ft	**Closure Azimuth:**	88.3085°
Comment:			
Vertical Section:			
Position of Origin (Relative to Slot centre)	**+N/-S:** 0.00US ft	**+E/-W:** 0.00US ft	
Vertical Section Azimuth:	89.64°		
Magnetic Parameters:			
Model: BGGM	**Field Strength:** 48476.2 nT	**Declination:** 7.43°	**Dip:** 60.50°

Target Set: Hadar 10 Fed Com 3H

Number of Targets: 3

Target: LP Tgt

Position: (Relative to Slot centre)

+N/-S: 117.49	Northing: 609231.84	Latitude: 32°40'26.21"	
+E/-W: 324.25	Easting: 685534.65	Longitude: -103°51'52.94"	
TVD (Drill Floor) :	9035.00 US ft		
Shape: Cuboid			
Orientation	Inclination: 0.00°	Azimuth: 0.00°	
Dimensions	Length: 20.00	Breadth: 20.00	Height: 20.(

Target: Mid Pt

Position: (Relative to Slot centre)

+N/-S: 132.08	Northing: 609246.43	Latitude: 32°40'26.26"	
+E/-W: 2594.20	Easting: 687804.60	Longitude: -103°51'26.38"	
TVD (Drill Floor) :	9075.00 US ft		
Shape: Cuboid			
Orientation	Inclination: 0.00°	Azimuth: 0.00°	
Dimensions	Length: 20.00	Breadth: 20.00	Height: 20.(

Target: PBHL 3H

Position: (Relative to Slot centre)

+N/-S: 147.10	Northing: 609261.45	Latitude: 32°40'26.30"	
+E/-W: 4981.86	Easting: 690192.26	Longitude: -103°50'58.45"	
TVD (Drill Floor) :	9085.00 US ft		
Shape: Cuboid			
Orientation	Inclination: -0.24°	Azimuth: 89.64°	
Dimensions	Length: 4924.00	Breadth: 50.00	Height: 20.(

Casing Points: (Relative to Slot Centre, TVD Relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)

Wellpath created using minimum curvature

Salient Points: (Relative to Slot Centre, TVD Relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)
8479.5	0	0	8479.5	0	0	0

8661.32	20	45.8	8657.65	21.9	22.52	22.66
9340.73	88.99	89.64	9038.48	119.21	517.75	518.49
11378.79	88.99	89.64	9074.57	131.86	2555.45	2556.23
11417.53	89.76	89.64	9074.99	132.1	2594.19	2594.97
13805.26	89.76	89.64	9084.99	147.12	4981.85	4982.68

Interpolated Points: (Relative to Slot Centre, TVD Relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	VS (US ft)
8479.5	0	0	8479.5	0	0	0
8579.5	11	45.8	8578.89	6.67	6.86	6.9
8661.32	20	45.8	8657.65	21.9	22.52	22.66
8679.5	21.44	49.73	8674.65	26.22	27.28	27.45
8779.5	30.45	64.38	8764.57	49.06	64.19	64.5
8879.5	40.39	72.58	8846.01	69.78	118.12	118.56
8979.5	50.71	77.94	8915.96	87.61	187.1	187.64
9079.5	61.22	81.9	8971.87	101.91	268.58	269.21
9179.5	71.81	85.13	9011.67	112.15	359.58	360.27
9279.5	82.46	87.98	9033.91	117.95	456.74	457.47
9340.73	88.99	89.64	9038.48	119.21	517.75	518.49
9379.5	88.99	89.64	9039.16	119.45	556.52	557.25
9479.5	88.99	89.64	9040.93	120.07	656.5	657.24
9579.5	88.99	89.64	9042.7	120.69	756.48	757.22
9679.5	88.99	89.64	9044.48	121.32	856.46	857.21
9779.5	88.99	89.64	9046.25	121.94	956.44	957.19
9879.5	88.99	89.64	9048.02	122.56	1056.43	1057.18
9979.5	88.99	89.64	9049.79	123.18	1156.41	1157.16
10079.5	88.99	89.64	9051.56	123.8	1256.39	1257.15
10179.5	88.99	89.64	9053.33	124.42	1356.37	1357.13
10279.5	88.99	89.64	9055.1	125.04	1456.36	1457.11
10379.5	88.99	89.64	9056.87	125.66	1556.34	1557.1
10479.5	88.99	89.64	9058.64	126.28	1656.32	1657.08
10579.5	88.99	89.64	9060.41	126.9	1756.3	1757.07
10679.5	88.99	89.64	9062.19	127.52	1856.29	1857.05
10779.5	88.99	89.64	9063.96	128.14	1956.27	1957.04
10879.5	88.99	89.64	9065.73	128.76	2056.25	2057.02
10979.5	88.99	89.64	9067.5	129.38	2156.23	2157
11079.5	88.99	89.64	9069.27	130	2256.22	2256.99
11179.5	88.99	89.64	9071.04	130.62	2356.2	2356.97
11279.5	88.99	89.64	9072.81	131.24	2456.18	2456.96
11378.79	88.99	89.64	9074.57	131.86	2555.45	2556.23
11379.5	89	89.64	9074.58	131.86	2556.16	2556.94
11417.53	89.76	89.64	9074.99	132.1	2594.19	2594.97
11479.5	89.76	89.64	9075.25	132.49	2656.16	2656.94

11579.5	89.76	89.64	9075.67	133.12	2756.16	2756.94
11679.5	89.76	89.64	9076.09	133.75	2856.15	2856.94
11779.5	89.76	89.64	9076.51	134.38	2956.15	2956.94
11879.5	89.76	89.64	9076.93	135.01	3056.15	3056.93
11979.5	89.76	89.64	9077.35	135.63	3156.14	3156.93
12079.5	89.76	89.64	9077.77	136.26	3256.14	3256.93
12179.5	89.76	89.64	9078.19	136.89	3356.14	3356.93
12279.5	89.76	89.64	9078.6	137.52	3456.14	3456.93
12379.5	89.76	89.64	9079.02	138.15	3556.13	3556.93
12479.5	89.76	89.64	9079.44	138.78	3656.13	3656.93
12579.5	89.76	89.64	9079.86	139.41	3756.13	3756.93
12679.5	89.76	89.64	9080.28	140.04	3856.12	3856.93
12779.5	89.76	89.64	9080.7	140.67	3956.12	3956.93
12879.5	89.76	89.64	9081.12	141.3	4056.12	4056.93
12979.5	89.76	89.64	9081.54	141.92	4156.12	4156.92
13079.5	89.76	89.64	9081.95	142.55	4256.11	4256.92
13179.5	89.76	89.64	9082.37	143.18	4356.11	4356.92
13279.5	89.76	89.64	9082.79	143.81	4456.11	4456.92
13379.5	89.76	89.64	9083.21	144.44	4556.1	4556.92
13479.5	89.76	89.64	9083.63	145.07	4656.1	4656.92
13579.5	89.76	89.64	9084.05	145.7	4756.1	4756.92
13679.5	89.76	89.64	9084.47	146.33	4856.1	4856.92
13779.5	89.76	89.64	9084.89	146.96	4956.09	4956.92
13805.26	89.76	89.64	9084.99	147.12	4981.85	4982.68

Formation Points: (Relative to Slot Centre, TVD Relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)

Weatherford International Limited.

) Fed Com 3H Lat

	32° 40' 25.07"
	-103° 51' 56.74"

	32°40'25.07"
	-103°51'56.74"

Drill Floor):	25.00US ft	**Relative To Mean Sea Level:**	3595.00US

Date: 15/Jul/2015 (dd/mmm/yyyy)

)0

)0

)0

Easting (US ft)	Name

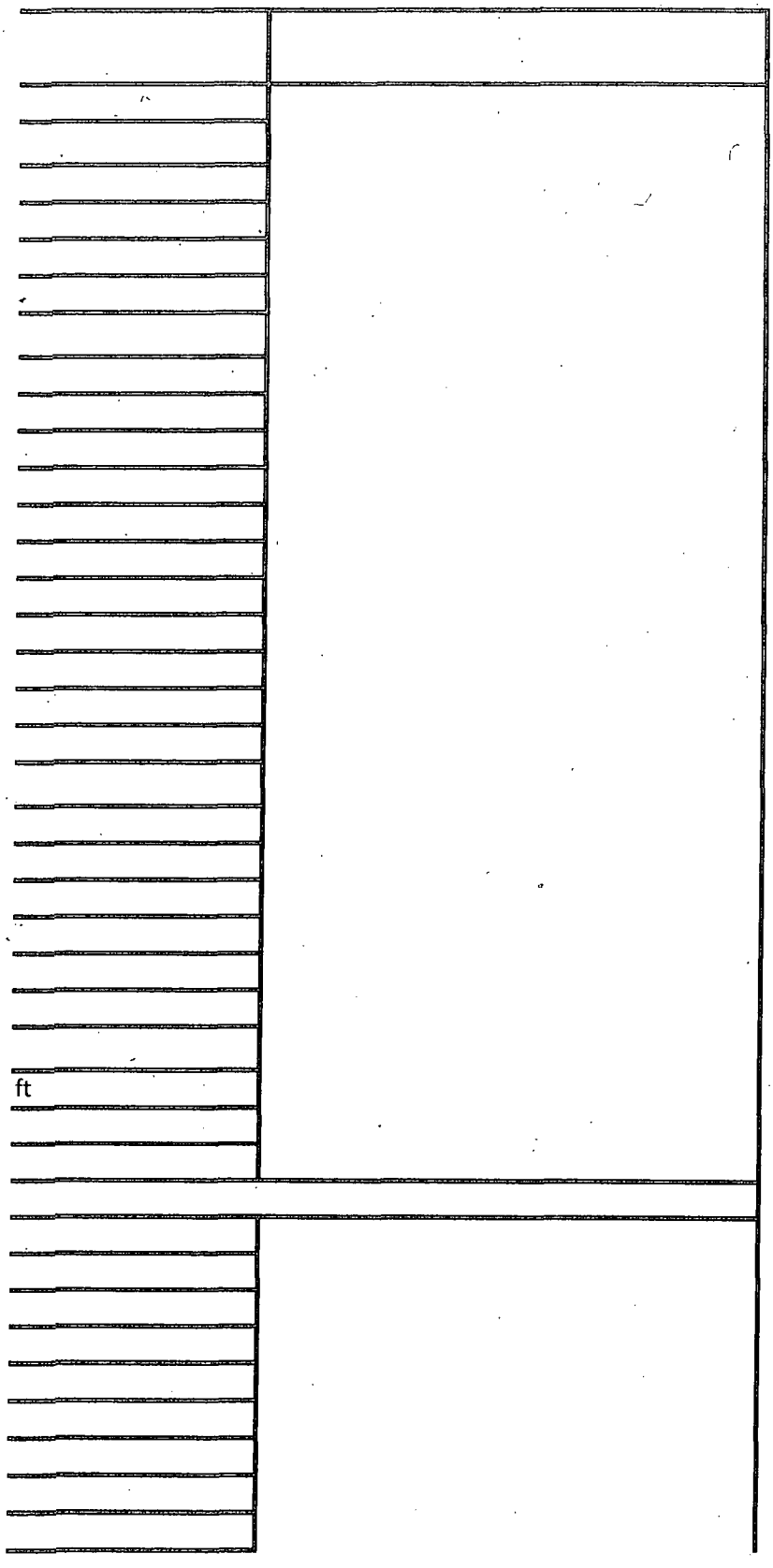
DLS (°/100 US ft)	B.Rate (°/100 US ft)	T.Rate (°/100 US ft)	T.Face (°)	Comment
0	0	0	0	KOP

11	11	0	45.8	Build/Turn
11	10.15	6.45	45.88	LP
0	0	0	0	Build
2	2	-0.01	359.64	Mid Pt Tgt/Hold
0	0	0	0	PBHL 3H

DLS (°/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
0	609114.35	685210.4	KOP
11	609121.02	685217.26	
11	609136.25	685232.92	Build/Turn
11	609140.57	685237.68	
11	609163.41	685274.59	
11	609184.13	685328.52	
11	609201.96	685397.5	
11	609216.26	685478.98	
11	609226.5	685569.98	
11	609232.3	685667.14	
11	609233.56	685728.15	LP
0	609233.8	685766.92	
0	609234.42	685866.9	
0	609235.04	685966.88	
0	609235.67	686066.86	
0	609236.29	686166.84	
0	609236.91	686266.83	
0	609237.53	686366.81	
0	609238.15	686466.79	
0	609238.77	686566.77	
0	609239.39	686666.76	
0	609240.01	686766.74	
0	609240.63	686866.72	
0	609241.25	686966.7	
0	609241.87	687066.69	
0	609242.49	687166.67	
0	609243.11	687266.65	
0	609243.73	687366.63	
0	609244.35	687466.62	
0	609244.97	687566.6	
0	609245.59	687666.58	
0	609246.21	687765.85	Build
2	609246.21	687766.56	
2	609246.45	687804.59	Mid Pt Tgt/Hold
0	609246.84	687866.56	

0	609247.47	687966.56	
0	609248.1	688066.55	
0	609248.73	688166.55	
0	609249.36	688266.55	
0	609249.98	688366.54	
0	609250.61	688466.54	
0	609251.24	688566.54	
0	609251.87	688666.54	
0	609252.5	688766.53	
0	609253.13	688866.53	
0	609253.76	688966.53	
0	609254.39	689066.52	
0	609255.02	689166.52	
0	609255.65	689266.52	
0	609256.27	689366.52	
0	609256.9	689466.51	
0	609257.53	689566.51	
0	609258.16	689666.51	
0	609258.79	689766.5	
0	609259.42	689866.5	
0	609260.05	689966.5	
0	609260.68	690066.5	
0	609261.31	690166.49	
0	609261.47	690192.25	PBHL 3H

Easting (US ft)	Name	Comment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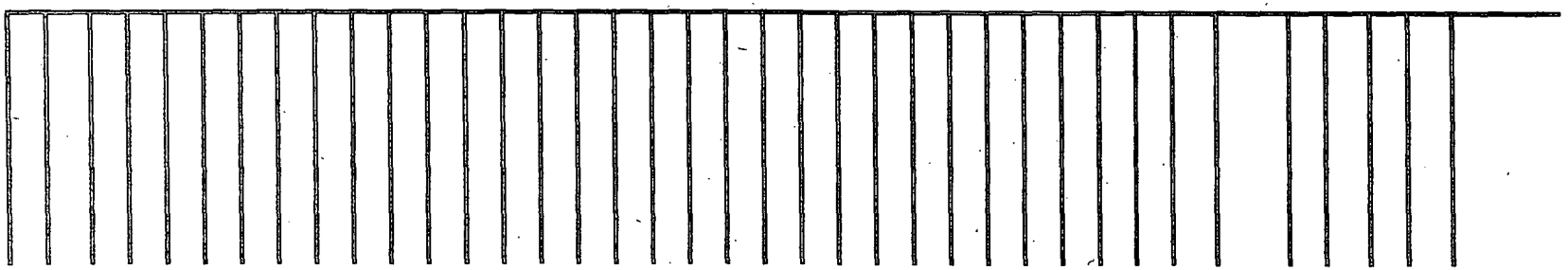

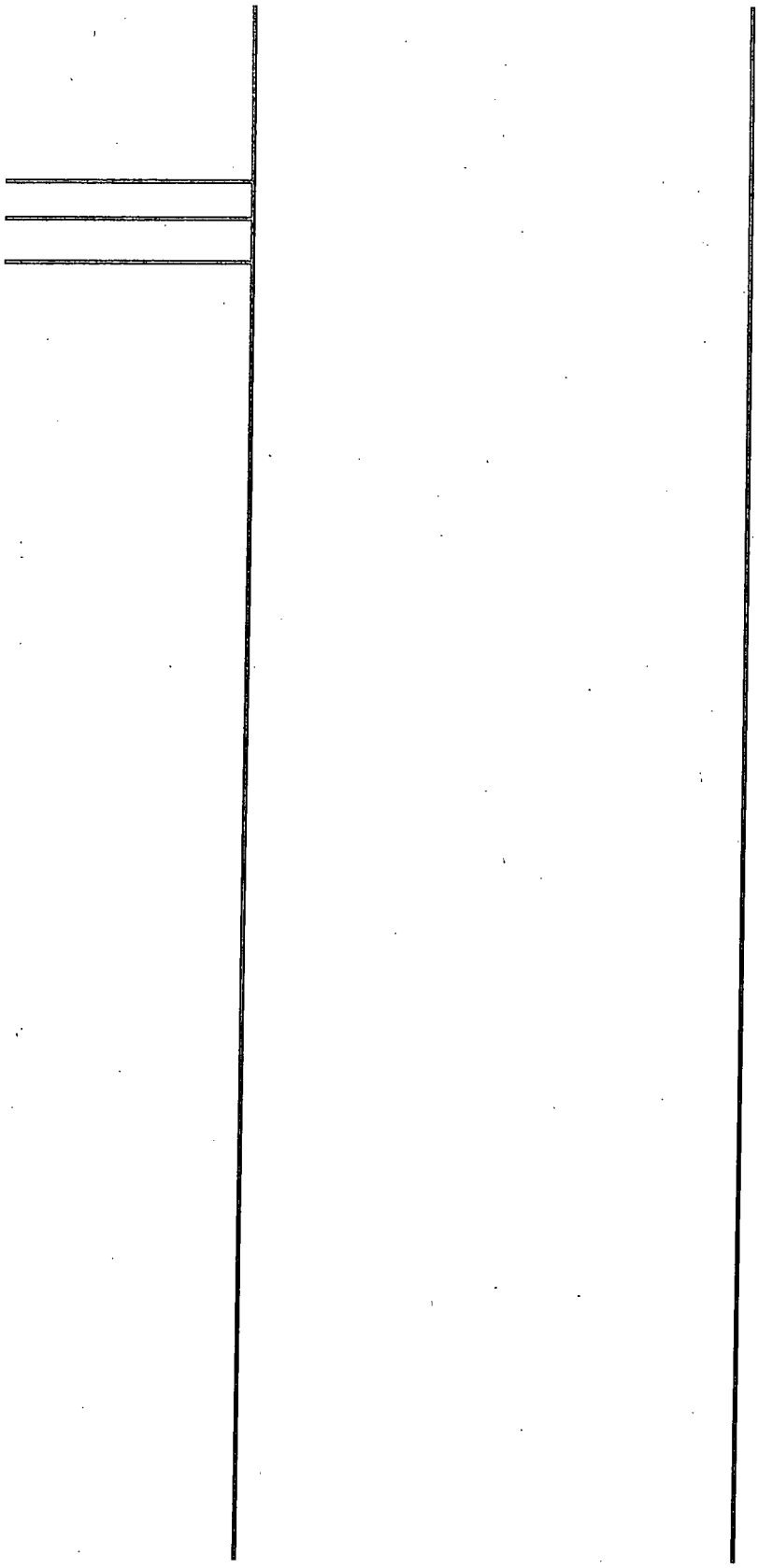

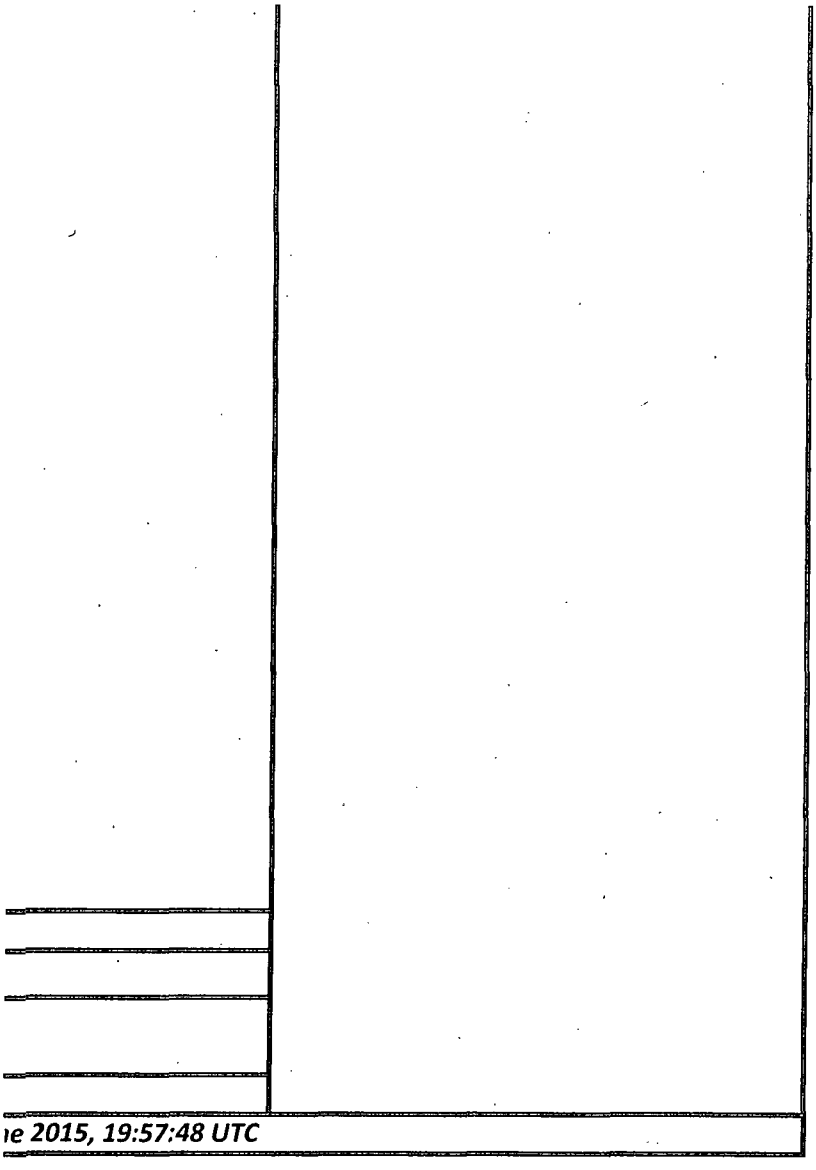
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