

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 30-025-42995	² Pool Code 96556	³ Pool Name Cotton Draw; Bone Spring, East
⁴ Property Code 314752	⁵ Property Name REBEL 20 FED	⁶ Well Number 6H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3563.8

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
C	20	24 S	32 E		250	NORTH	1980	WEST	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
N	20	24 S	32 E		330	SOUTH	2200	WEST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
160 ac			

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.

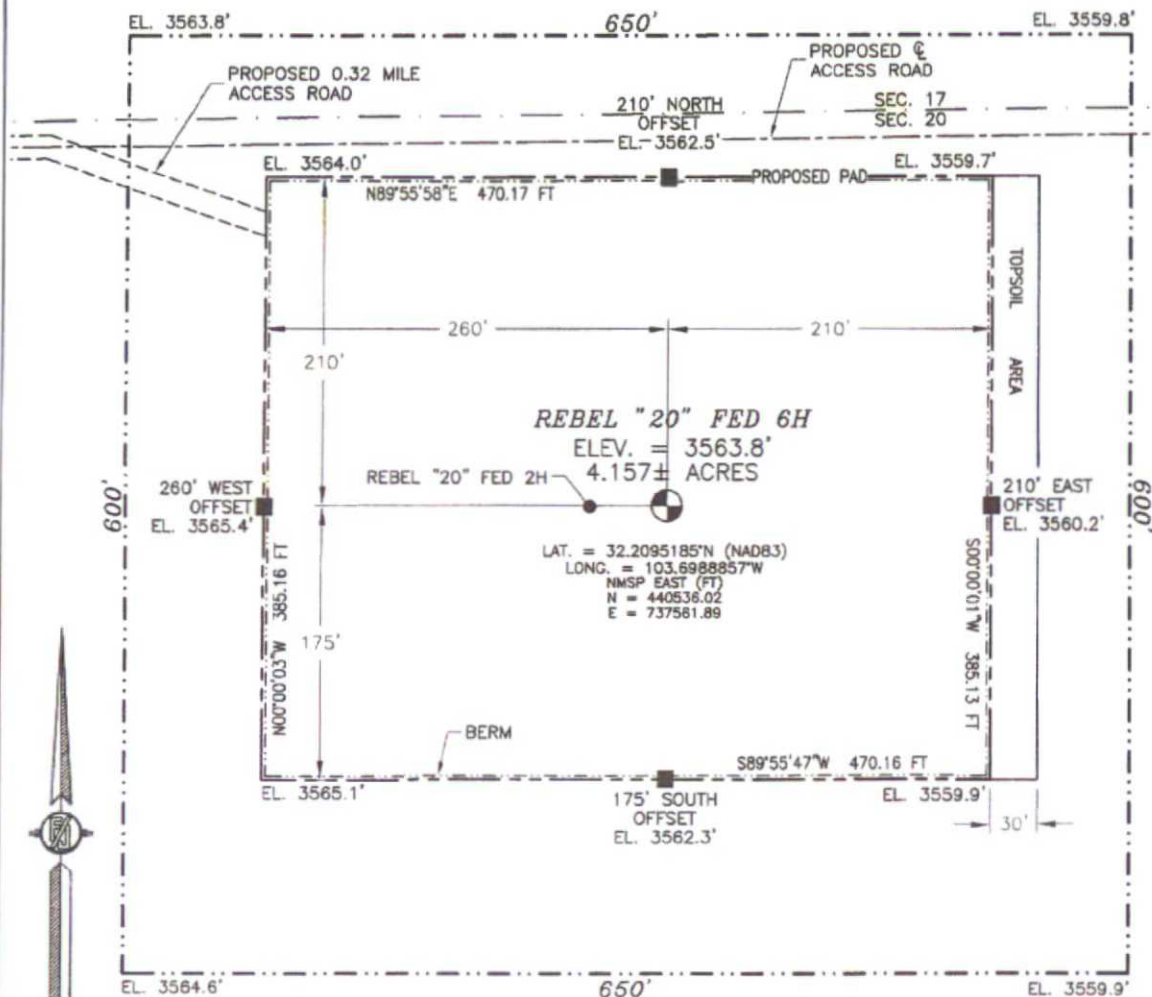
N89°19'12"E 2643.68 FT N89°25'24"E 2641.68 FT NW CORNER SEC. 20 LAT. = 32.2101731°N LONG. = 103.7052886°W NMSP EAST (FT) N = 440762.51 E = 735580.15 NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83) BASED. BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. SW CORNER SEC. 20 LAT. = 32.1956460°N LONG. = 103.7052343°W NMSP EAST (FT) N = 435477.84 E = 735627.83 S89°18'59"W 2634.08 FT		N 0 CORNER SEC. 20 LAT. = 32.2102165°N LONG. = 103.6967431°W NMSP EAST (FT) N = 440793.88 E = 738223.07 NE CORNER SEC. 20 LAT. = 32.2102463°N LONG. = 103.6882040°W NMSP EAST (FT) N = 440820.46 E = 740864.04 SE CORNER SEC. 20 LAT. = 32.2029993°N LONG. = 103.6881898°W NMSP EAST (FT) N = 438184.10 E = 740884.26 S89°19'56"W 2643.77 FT		¹⁶ 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 released 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. <i>Trina C. Couch</i> 6/9/15 Signature Date Trina C. Couch, Regulatory Analyst Printed Name trina.couch@dmn.com E-mail Address ¹⁷ 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. APRIL 21, 2015 Date of Survey <i>[Signature]</i> Signature and Seal of Professional Surveyor Certificate Number: FILLMORE, TARAMILLO, PLS 12797 SURVEY NO. 3834
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JAN 04 2016

SECTION 20, TOWNSHIP 24 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 THE INTERSECTION OF STATE HIGHWAY 128 AND BUCK JACKSON ROAD GO SOUTHWEST ON BUCK JACKSON ROAD 0.43 MILE TO CALICHE LEASE ROAD, WEST OF CALICHE PIT ON LEFT, GO SOUTH ON CALICHE LEASE ROAD 1.45 MILES TO EXISTING 2-TRACK ROAD ON LEFT. GO EAST ON 2-TRACK ROAD ALONG THE SOUTH SIDE OF THE NORTH LINE OF SECTION 19, 1.0 MILE TO THE NORTHEAST CORNER OF SECTION 19, FOLLOW PROPOSED FLAGGED ROAD LINE ALONG THE SOUTH SIDE OF THE NORTH LINE OF SECTION 20, GO EAST 0.32 MILE TO NORTHWEST CORNER OF PAD.

DEVON ENERGY PRODUCTION COMPANY, L.P.

REBEL "20" FED 6H

LOCATED 250 FT. FROM THE NORTH LINE
AND 1980 FT. FROM THE WEST LINE OF

SECTION 20, TOWNSHIP 24 SOUTH,
RANGE 32 EAST, N.M.P.M.

LEA COUNTY, STATE OF NEW MEXICO

APRIL 21, 2015

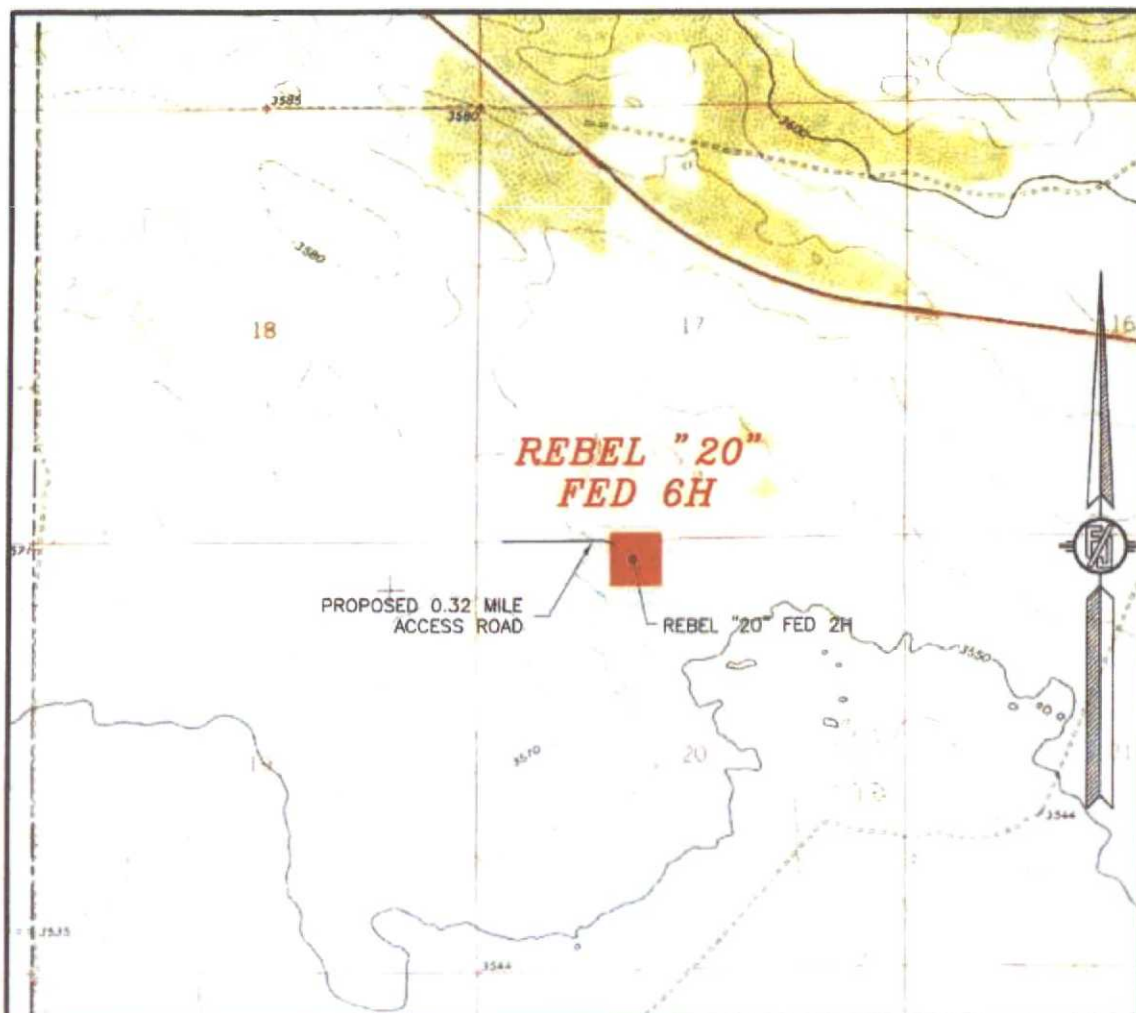
SURVEY NO. 3834

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

SECTION 20, TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
PADUCA BREAKS NW

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

REBEL "20" FED 6H

LOCATED 250 FT. FROM THE NORTH LINE
AND 1980 FT. FROM THE WEST LINE OF

SECTION 20, TOWNSHIP 24 SOUTH,
RANGE 32 EAST, N.M.P.M.

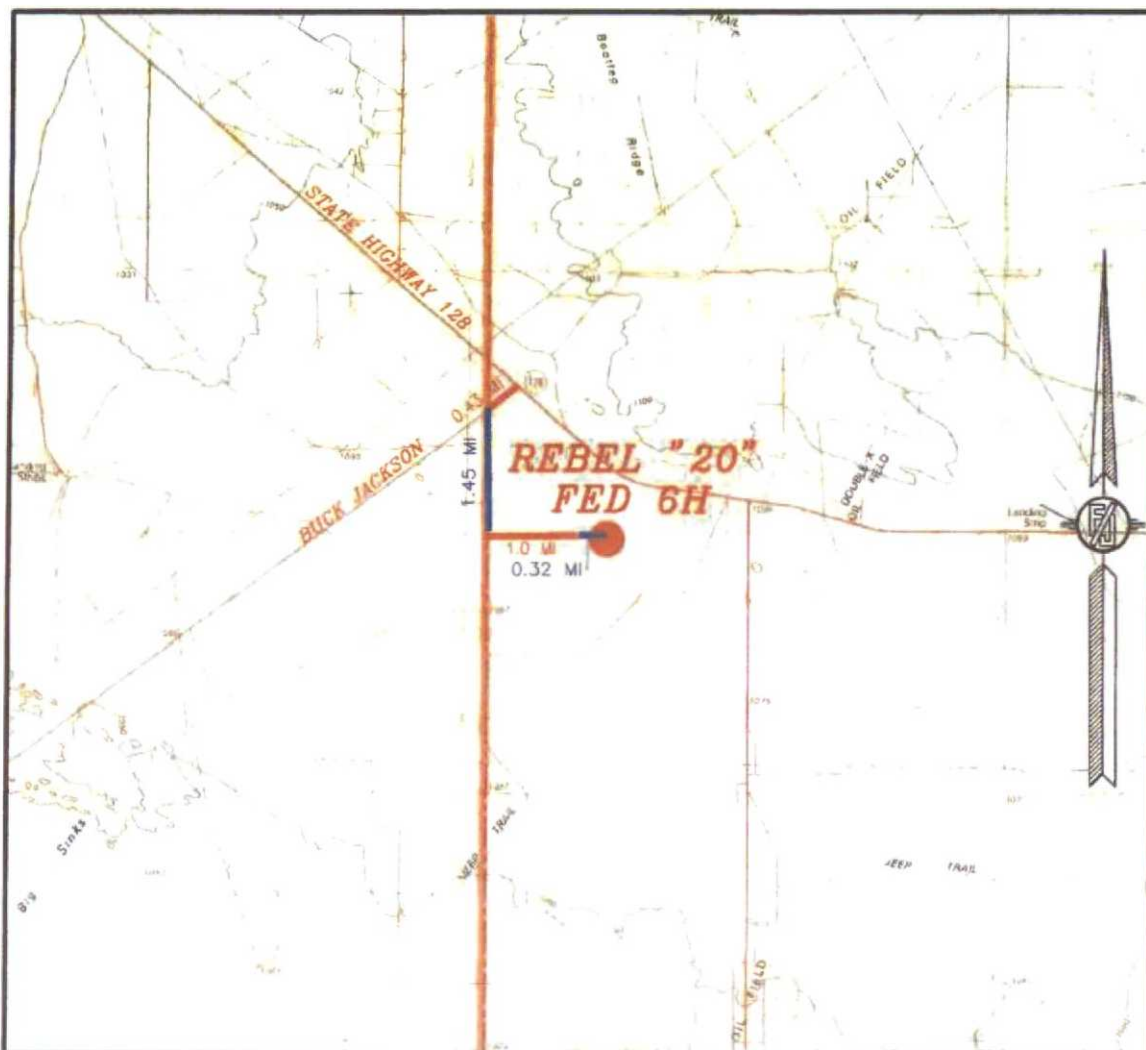
LEA COUNTY, STATE OF NEW MEXICO

APRIL 21, 2015

SURVEY NO. 3834

MADRON SURVEYING, INC. 301 SOUTH CANAL (S75) 234-3341 CARLSBAD, NEW MEXICO

SECTION 20, TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

REBEL "20" FED 6H

LOCATED 250 FT. FROM THE NORTH LINE
AND 1980 FT. FROM THE WEST LINE OF

SECTION 20, TOWNSHIP 24 SOUTH,
RANGE 32 EAST, N.M.P.M.

LEA COUNTY, STATE OF NEW MEXICO

DIRECTIONS TO LOCATION

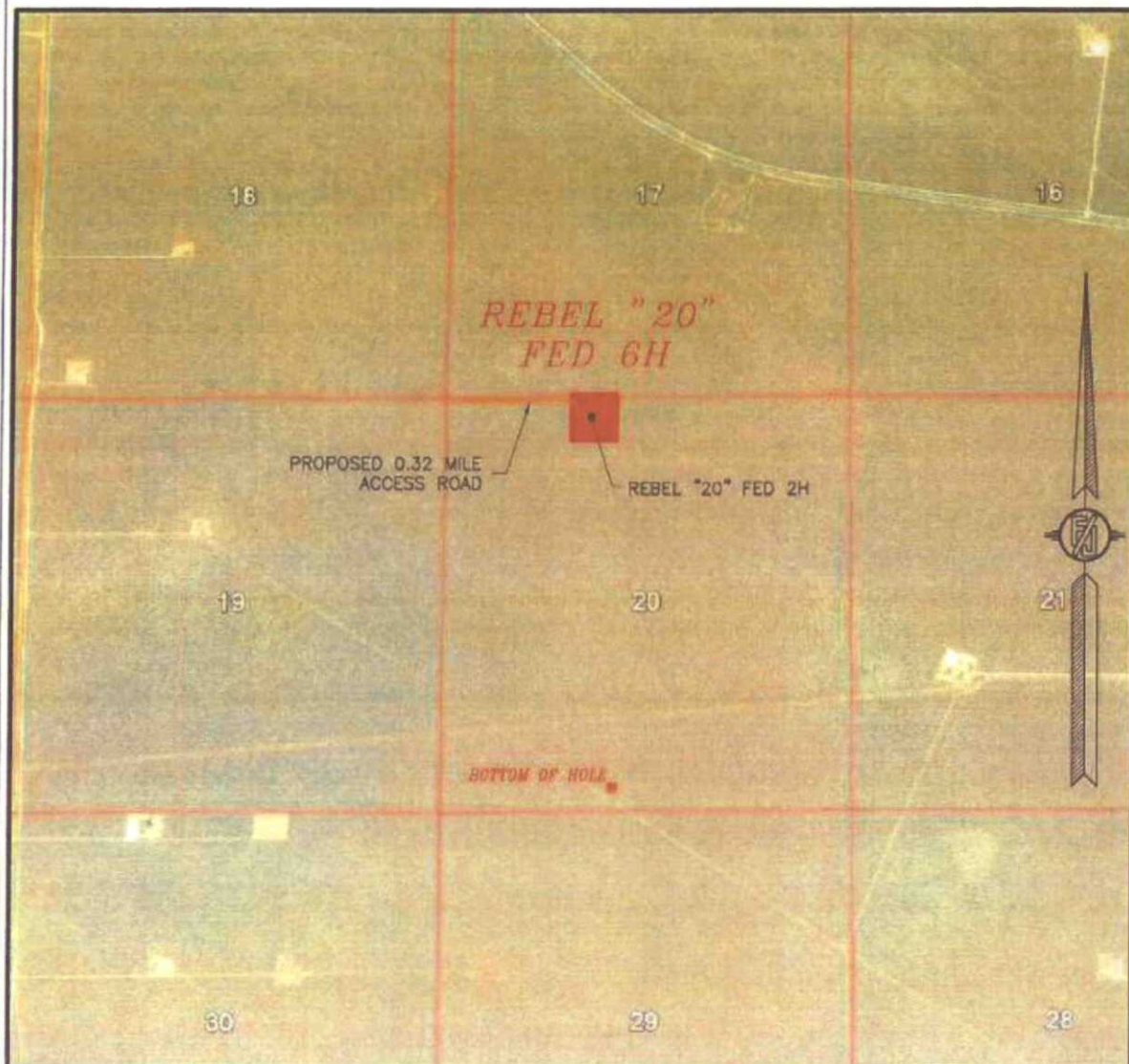
FROM THE INTERSECTION OF STATE HIGHWAY 128 AND BUCK JACKSON ROAD GO SOUTHWEST ON BUCK JACKSON ROAD 0.43 MILE TO CALICHE LEASE ROAD, WEST OF CALICHE PIT ON LEFT, GO SOUTH ON CALICHE LEASE ROAD 1.45 MILES TO EXISTING 2-TRACK ROAD ON LEFT. GO EAST ON 2-TRACK ROAD ALONG THE SOUTH SIDE OF THE NORTH LINE OF SECTION 19, 1.0 MILE TO THE NORTHEAST CORNER OF SECTION 19, FOLLOW PROPOSED FLAGGED ROAD LINE ALONG THE SOUTH SIDE OF THE NORTH LINE OF SECTION 20, GO EAST 0.32 MILE TO NORTHWEST CORNER OF PAD.

APRIL 21, 2015

SURVEY NO. 3834

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

SECTION 20, TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
FEBRUARY 2014

DEVON ENERGY PRODUCTION COMPANY, L.P.

REBEL "20" FED 6H

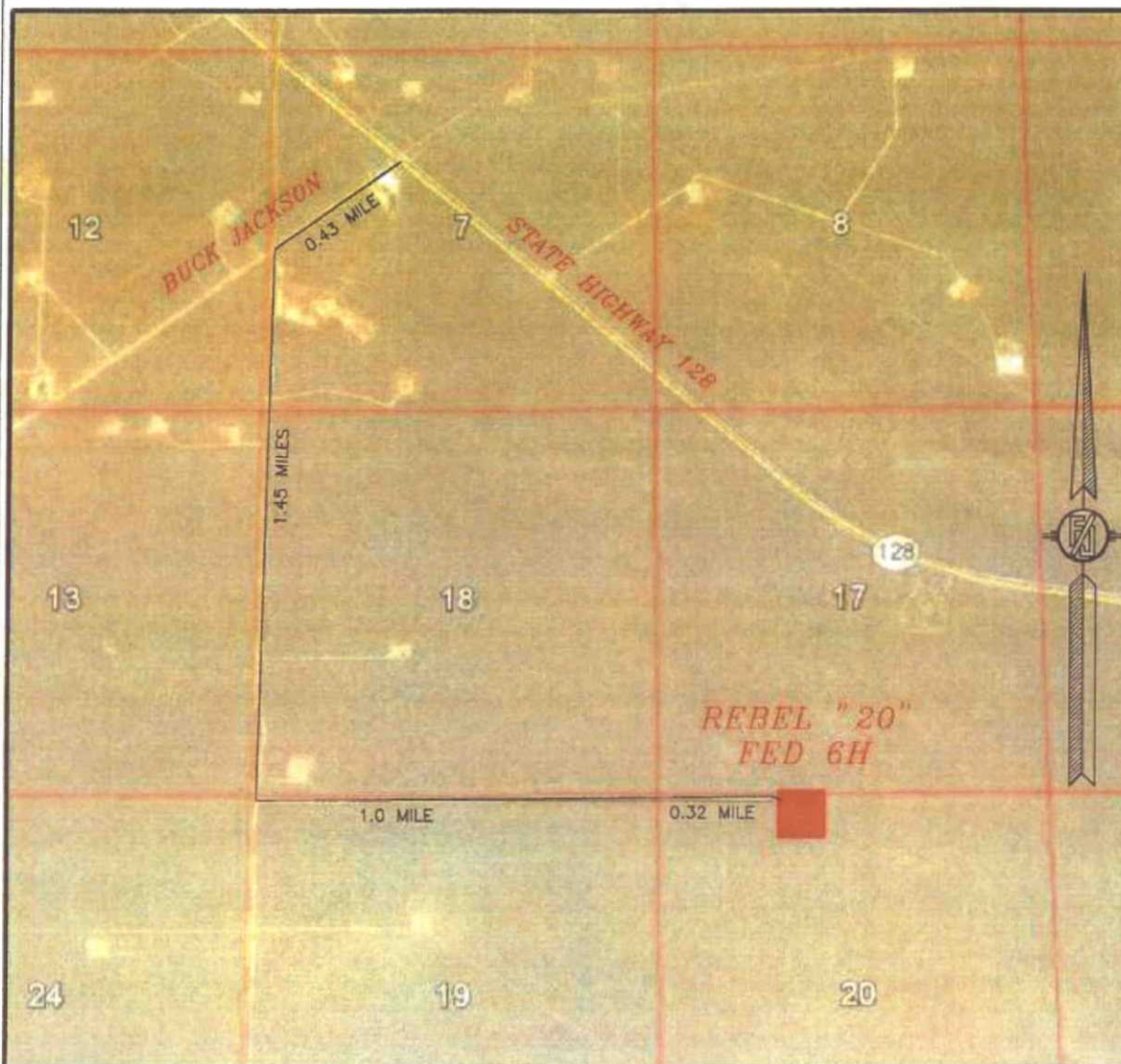
LOCATED 250 FT. FROM THE NORTH LINE
AND 1980 FT. FROM THE WEST LINE OF
SECTION 20, TOWNSHIP 24 SOUTH,
RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

APRIL 21, 2015

SURVEY NO. 3834

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

SECTION 20, TOWNSHIP 24 SOUTH, RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
ACCESS AERIAL ROUTE MAP



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
FEBRUARY 2014

DEVON ENERGY PRODUCTION COMPANY, L.P.

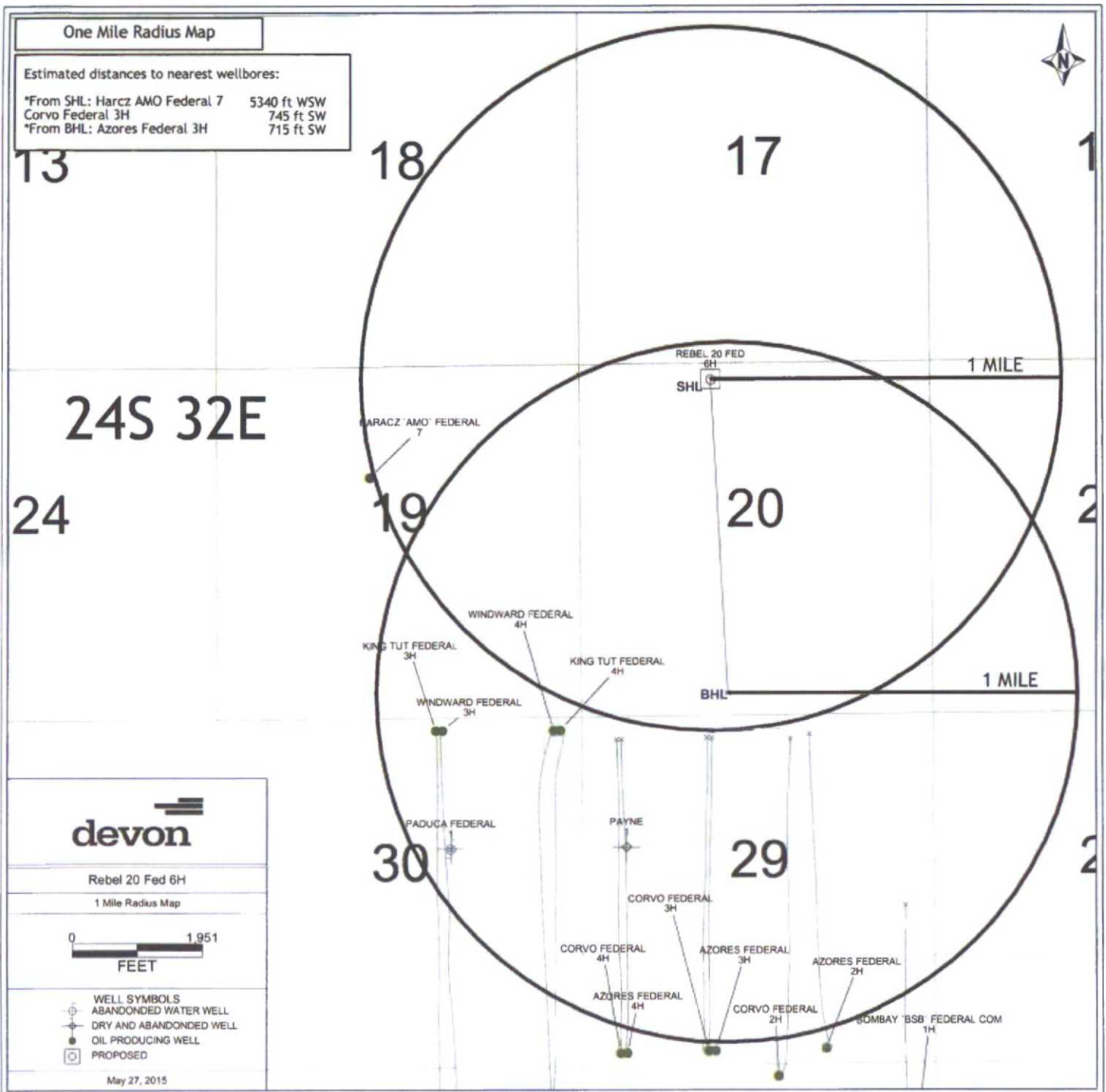
REBEL "20" FED 6H

LOCATED 250 FT. FROM THE NORTH LINE
AND 1980 FT. FROM THE WEST LINE OF
SECTION 20, TOWNSHIP 24 SOUTH,
RANGE 32 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

APRIL 21, 2015

SURVEY NO. 3834

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



Plan Data for Rebel 20 Fed 6H

Dogleg Severity Unit: 1/100000ft

MD	Inc	Az	TV	N/S	E/W	North	East	Vsec	DLS
(USft)	(°)	(°)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)	(USft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4700.00	0.00	0.00	4700.00	0.00	0.00	448536.92	737561.89	0.00	0.00
5200.00	5.00	30.00	5393.32	18.88	10.90	440554.90	737572.79	-18.43	1.00
6000.00	0.00	0.00	5995.05	117.40	67.57	440851.05	737607.65	-77.36	0.00
7000.00	0.00	0.00	6925.15	117.40	67.57	440851.05	737629.48	-114.21	0.00
8000.00	0.00	0.00	7822.13	117.40	67.57	440851.05	737629.48	-114.21	0.00
9000.00	0.00	0.00	8695.05	117.40	67.57	440851.05	737629.48	-114.21	0.00
10000.00	0.00	0.00	9545.05	117.40	67.57	440851.05	737629.48	-114.21	0.00
11000.00	0.00	0.00	10372.13	117.40	67.57	440851.05	737629.48	-114.21	0.00
12000.00	0.00	0.00	11177.48	117.40	67.57	440851.05	737629.48	-114.21	0.00
13000.00	0.00	0.00	11955.05	117.40	67.57	440851.05	737629.48	-114.21	0.00
14000.00	0.00	0.00	12705.05	117.40	67.57	440851.05	737629.48	-114.21	0.00
15000.00	0.00	0.00	13437.48	117.40	67.57	440851.05	737629.48	-114.21	0.00

Plan Data for Rebel 20 Fed 6H

Slot: Rebel 20 Fed 6H

Position:
Offset is from Site Centre
-N/-S: 0.570USft Northing: 440536.02USft Latitude: 32°12'34.3"
+E/-M: 49.990USft Easting: 737561.89USft Longitude: -103°41'56.0"
Elevation Above VMD: 3564.00USft

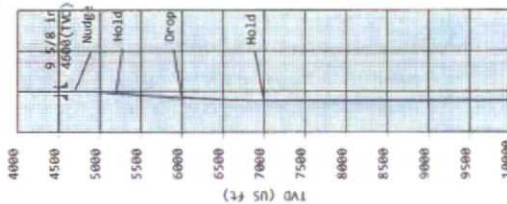
Plan Data for Rebel 20 Fed 6H

Target Set Information:
Name: Rebel 20 Fed 6H

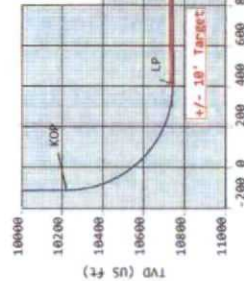
Position offsets from Slot centre
Name TVO N/S E/W Northing Easting Shape Comment
(USft) (USft) (USft) (USft) (USft)
PHIL 6H 10702.06 -4702.05 262.28 435833.99 737824.17 Cuboid

Plan Data for Rebel 20 Fed 6H

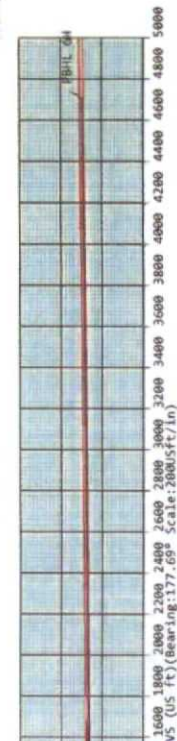
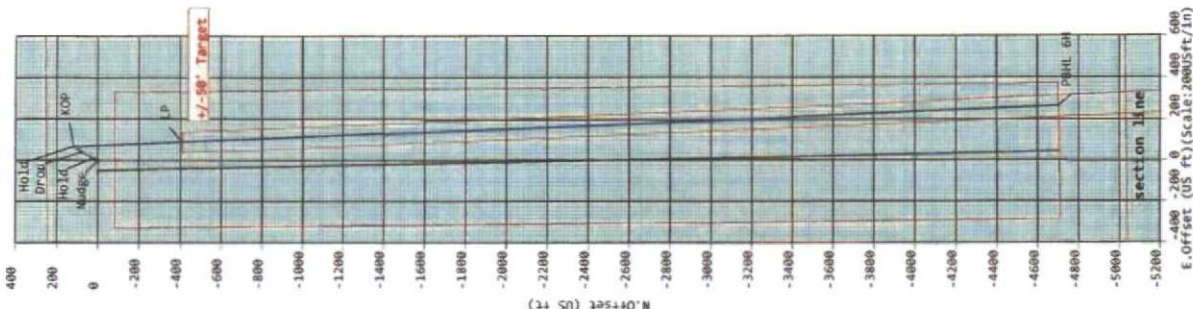
Well: Rebel 20 Fed 6H
Type: Main-Well
File Number:
Plan Folder: P1 Plan: P1.V1
Vertical Section: Position offset of origin from Slot centre:
N/S: 0.00USft Easting: 177.69°
Magnetic Parameters:
Model: Field Strength: Declination: 66.10° Date: 2015-07-30
800m 44210(m) 7.32°



VS (US ft)(Bearing:177.69° Scale:500USft/in)



VS (US ft)(Bearing:177.69° Scale:1000USft/in)



5D Plan Report**Devon Energy****Field Name:** *Lea Co, NM Nad 83 NMEZ***Site Name:** *Rebel 20 Fed 2H, 6H Pad***Well Name:** *Rebel 20 Fed 6H***Plan:** *P1:V1*

28 May 2015



Rebel 20 Fed 6H

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 Rebel 20 Fed 2H, 6H Pad	Units : US ft	North Reference : Grid	Convergence Angle : 0.34	
	Position	Northing : 440535.45 US ft	Latitude : 32° 12' 34.26"	
		Easting : 737511.90 US ft	Longitude : -103° 41' 56.57"	
		Elevation above Mean Sea Level:3564.00 US ft		
Comment :				
Slot Name Rebel 20 Fed 6H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.57 US ft	Northing :440536.02 US ft	Latitude : 32°12'34.27"	
	+E / -W : 49.99 US ft	Easting :737561.89 US ft	Longitude : -103°41'55.99"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3564.00 US ft				
Comment :				
Well Name Rebel 20 Fed 6H	Type : Main well		UWI :	Plan : P1:V1
	Rig Height <i>Kelly Bushing</i> : 25.00 US ft		Comment :	
	Relative to Mean Sea Level: 3589.00 US ft			
	Closure Distance : 4709.34 US ft		Closure Azimuth : 176.807°	
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft		+E / -W : 0.00 US ft	Az :177.69°
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48210.4nT	Dec : 7.32°	Dip : 60.10° Date : 30/Jul/2015

Target Set

Name : Rebel 20 Fed 6H **Number of Targets :** 1

Comment :

Target Name: PBHL 6H Shape: Cuboid	Position (Relative to Slot centre)			
	+N / -S : -4702.03US ft	Northing : 435833.99 US ft	Latitude : 32°11'47.72"	
	+E / -W : 262.28 US ft	Easting : 737824.17US ft	Longitude : -103°41'53.26"	
	TVD (Kelly Bushing) : 10702.00 US ft			
	Orientation	Azimuth : 177.69°	Inclination : 0.53°	
Dimensions	Length : 8594.00 US ft	Breadth : 100.00 US ft	Height : 20.00 US ft	

Casing Points (Relative to Slot centre, TVD relative to Kelly Bushing)								
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	Name
975.00	0.00	0.00	975.00	0.00	0.00	440536.02	737561.89	13 3/8 in
4600.00	0.00	0.00	4600.00	0.00	0.00	440536.02	737561.89	9 5/8 in

SD Plan Report

Well path created using minimum curvature

Salient Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
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
0.00	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	
975.00	0.00	0.00	975.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	13 3/8 in
4600.00	0.00	0.00	4600.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	9 5/8 in
4700.00	0.00	0.00	4700.00	0.00	0.00	-0.00	0.00	0.00	0.00	0.00	Nudge
5200.00	5.00	30.00	5199.37	18.88	10.90	-18.43	1.00	1.00	0.00	30.00	Hold
6000.00	5.00	30.00	5996.32	79.27	45.76	-77.36	0.00	0.00	0.00	0.00	Drop
7000.00	0.00	0.00	6995.05	117.03	67.57	-114.21	0.50	-0.50	0.00	180.00	Hold
10226.10	0.00	0.00	10221.15	117.03	67.57	-114.21	0.00	0.00	0.00	0.00	KOP
11049.13	90.53	177.69	10742.00	-408.26	88.79	411.51	11.00	11.00	0.00	177.69	LP
15346.59	90.53	177.69	10702.00	-4702.03	262.28	4708.78	0.00	0.00	0.00	0.00	PBHL 6H

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)											
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
4600.00	0.00	0.00	4600.00	0.00	0.00	-0.00	0.00	440536.02	737561.89		9 5/8 in
4700.00	0.00	0.00	4700.00	0.00	0.00	-0.00	0.00	440536.02	737561.89		Nudge
4800.00	1.00	30.00	4799.99	0.76	0.44	-0.74	1.00	440536.78	737562.33		
4900.00	2.00	30.00	4899.96	3.02	1.75	-2.95	1.00	440539.04	737563.64		
5000.00	3.00	30.00	4999.86	6.80	3.93	-6.64	1.00	440542.82	737565.82		
5100.00	4.00	30.00	5099.68	12.09	6.98	-11.80	1.00	440548.11	737568.87		
5200.00	5.00	30.00	5199.37	18.88	10.90	-18.43	1.00	440554.90	737572.79		Hold
5300.00	5.00	30.00	5298.99	26.43	15.26	-25.79	0.00	440562.45	737577.15		
5400.00	5.00	30.00	5398.60	33.98	19.62	-33.16	0.00	440570.00	737581.51		
5500.00	5.00	30.00	5498.22	41.53	23.97	-40.53	0.00	440577.55	737585.86		
5600.00	5.00	30.00	5597.84	49.07	28.33	-47.89	0.00	440585.09	737590.22		
5700.00	5.00	30.00	5697.46	56.62	32.69	-55.26	0.00	440592.64	737594.58		
5800.00	5.00	30.00	5797.08	64.17	37.05	-62.62	0.00	440600.19	737598.94		
5900.00	5.00	30.00	5896.70	71.72	41.41	-69.99	0.00	440607.74	737603.30		
6000.00	5.00	30.00	5996.32	79.27	45.76	-77.36	0.00	440615.29	737607.65		Drop
6100.00	4.50	30.00	6095.98	86.44	49.90	-84.35	0.50	440622.46	737611.79		
6200.00	4.00	30.00	6195.70	92.85	53.61	-90.62	0.50	440628.87	737615.50		
6300.00	3.50	30.00	6295.49	98.52	56.88	-96.15	0.50	440634.54	737618.77		
6400.00	3.00	30.00	6395.33	103.43	59.71	-100.94	0.50	440639.45	737621.60		
6500.00	2.50	30.00	6495.21	107.58	62.11	-104.99	0.50	440643.60	737624.00		
6600.00	2.00	30.00	6595.13	110.98	64.08	-108.31	0.50	440647.00	737625.97		
6700.00	1.50	30.00	6695.09	113.63	65.60	-110.89	0.50	440649.65	737627.49		
6800.00	1.00	30.00	6795.06	115.52	66.69	-112.74	0.50	440651.54	737628.58		
6900.00	0.50	30.00	6895.05	116.65	67.35	-113.84	0.50	440652.67	737629.24		
7000.00	0.00	0.00	6995.05	117.03	67.57	-114.21	0.50	440653.05	737629.46		Hold
7100.00	0.00	0.00	7095.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
7200.00	0.00	0.00	7195.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
7300.00	0.00	0.00	7295.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
7400.00	0.00	0.00	7395.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
7500.00	0.00	0.00	7495.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
7600.00	0.00	0.00	7595.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
7700.00	0.00	0.00	7695.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
7800.00	0.00	0.00	7795.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
7900.00	0.00	0.00	7895.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
8000.00	0.00	0.00	7995.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
8100.00	0.00	0.00	8095.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
8200.00	0.00	0.00	8195.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
8300.00	0.00	0.00	8295.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
8400.00	0.00	0.00	8395.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
8500.00	0.00	0.00	8495.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
8600.00	0.00	0.00	8595.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
8700.00	0.00	0.00	8695.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		
8800.00	0.00	0.00	8795.05	117.03	67.57	-114.21	0.00	440653.05	737629.46		

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
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
8900.00	0.00	0.00	8895.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9000.00	0.00	0.00	8995.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9100.00	0.00	0.00	9095.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9200.00	0.00	0.00	9195.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9300.00	0.00	0.00	9295.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9400.00	0.00	0.00	9395.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9500.00	0.00	0.00	9495.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9600.00	0.00	0.00	9595.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9700.00	0.00	0.00	9695.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9800.00	0.00	0.00	9795.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
9900.00	0.00	0.00	9895.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
10000.00	0.00	0.00	9995.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
10100.00	0.00	0.00	10095.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
10200.00	0.00	0.00	10195.05	117.03	67.57	-114.21	0.00	440653.05	737629.46	
10226.10	0.00	0.00	10221.15	117.03	67.57	-114.21	0.00	440653.05	737629.46	KOP
10300.00	8.13	177.69	10294.80	111.80	67.78	-108.98	11.00	440647.82	737629.67	
10400.00	19.13	177.69	10391.84	88.29	68.73	-85.45	11.00	440624.31	737630.62	
10500.00	30.13	177.69	10482.60	46.71	70.41	-43.84	11.00	440582.73	737632.30	
10600.00	41.13	177.69	10563.76	-11.40	72.76	14.33	11.00	440524.62	737634.65	
10700.00	52.13	177.69	10632.32	-83.93	75.69	86.91	11.00	440452.09	737637.58	
10800.00	63.13	177.69	10685.78	-168.19	79.09	171.24	11.00	440367.83	737640.98	
10900.00	74.13	177.69	10722.17	-261.09	82.84	264.22	11.00	440274.93	737644.73	
11000.00	85.13	177.69	10740.14	-359.23	86.81	362.43	11.00	440176.79	737648.70	
11049.13	90.53	177.69	10742.00	-408.26	88.79	411.51	11.00	440127.76	737650.68	LP
11100.00	90.53	177.69	10741.52	-459.09	90.84	462.38	0.00	440076.93	737652.73	
11200.00	90.53	177.69	10740.59	-559.00	94.88	562.37	0.00	439977.02	737656.77	
11300.00	90.53	177.69	10739.66	-658.92	98.92	662.37	0.00	439877.10	737660.81	
11400.00	90.53	177.69	10738.73	-758.83	102.96	762.37	0.00	439777.19	737664.85	
11500.00	90.53	177.69	10737.80	-858.75	106.99	862.36	0.00	439677.27	737668.88	
11600.00	90.53	177.69	10736.87	-958.66	111.03	962.36	0.00	439577.36	737672.92	
11700.00	90.53	177.69	10735.94	-1058.58	115.07	1062.35	0.00	439477.44	737676.96	
11800.00	90.53	177.69	10735.01	-1158.49	119.10	1162.35	0.00	439377.53	737680.99	
11900.00	90.53	177.69	10734.08	-1258.40	123.14	1262.34	0.00	439277.62	737685.03	
12000.00	90.53	177.69	10733.15	-1358.32	127.18	1362.34	0.00	439177.70	737689.07	
12100.00	90.53	177.69	10732.22	-1458.23	131.21	1462.34	0.00	439077.79	737693.10	
12200.00	90.53	177.69	10731.29	-1558.15	135.25	1562.33	0.00	438977.87	737697.14	
12300.00	90.53	177.69	10730.36	-1658.06	139.29	1662.33	0.00	438877.96	737701.18	
12400.00	90.53	177.69	10729.43	-1757.97	143.33	1762.32	0.00	438778.05	737705.22	
12500.00	90.53	177.69	10728.49	-1857.89	147.36	1862.32	0.00	438678.13	737709.25	
12600.00	90.53	177.69	10727.56	-1957.80	151.40	1962.31	0.00	438578.22	737713.29	
12700.00	90.53	177.69	10726.63	-2057.72	155.44	2062.31	0.00	438478.30	737717.33	
12800.00	90.53	177.69	10725.70	-2157.63	159.47	2162.31	0.00	438378.39	737721.36	
12900.00	90.53	177.69	10724.77	-2257.55	163.51	2262.30	0.00	438278.47	737725.40	
13000.00	90.53	177.69	10723.84	-2357.46	167.55	2362.30	0.00	438178.56	737729.44	
13100.00	90.53	177.69	10722.91	-2457.37	171.58	2462.29	0.00	438078.65	737733.47	
13200.00	90.53	177.69	10721.98	-2557.29	175.62	2562.29	0.00	437978.73	737737.51	
13300.00	90.53	177.69	10721.05	-2657.20	179.66	2662.28	0.00	437878.82	737741.55	
13400.00	90.53	177.69	10720.12	-2757.12	183.70	2762.28	0.00	437778.90	737745.59	
13500.00	90.53	177.69	10719.19	-2857.03	187.73	2862.28	0.00	437678.99	737749.62	
13600.00	90.53	177.69	10718.26	-2956.94	191.77	2962.27	0.00	437579.08	737753.66	
13700.00	90.53	177.69	10717.33	-3056.86	195.81	3062.27	0.00	437479.16	737757.70	
13800.00	90.53	177.69	10716.39	-3156.77	199.84	3162.26	0.00	437379.25	737761.73	
13900.00	90.53	177.69	10715.46	-3256.69	203.88	3262.26	0.00	437279.33	737765.77	
14000.00	90.53	177.69	10714.53	-3356.60	207.92	3362.25	0.00	437179.42	737769.81	
14100.00	90.53	177.69	10713.60	-3456.51	211.96	3462.25	0.00	437079.51	737773.85	
14200.00	90.53	177.69	10712.67	-3556.43	215.99	3562.24	0.00	436979.59	737777.88	
14300.00	90.53	177.69	10711.74	-3656.34	220.03	3662.24	0.00	436879.68	737781.92	
14400.00	90.53	177.69	10710.81	-3756.26	224.07	3762.24	0.00	436779.76	737785.96	
14500.00	90.53	177.69	10709.88	-3856.17	228.10	3862.23	0.00	436679.85	737789.99	

5D Plan Report

Interpolated Points (Relative to Slot centre, TVD relative to Kelly Bushing)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	H.Offset (US ft)	E.Offset (US ft)	VS (US ft)	DLS (%/100 US ft)	Northing (US ft)	Easting (US ft)	Comment
14600.00	90.53	177.69	10708.95	-3956.09	232.14	3962.23	0.00	436579.93	737794.03	
14700.00	90.53	177.69	10708.02	-4056.00	236.18	4062.22	0.00	436480.02	737798.07	
14800.00	90.53	177.69	10707.09	-4155.91	240.21	4162.22	0.00	436380.11	737802.10	
14900.00	90.53	177.69	10706.16	-4255.83	244.25	4262.21	0.00	436280.19	737806.14	
15000.00	90.53	177.69	10705.23	-4355.74	248.29	4362.21	0.00	436180.28	737810.18	
15100.00	90.53	177.69	10704.30	-4455.66	252.33	4462.21	0.00	436080.36	737814.22	
15200.00	90.53	177.69	10703.36	-4555.57	256.36	4562.20	0.00	435980.45	737818.25	
15300.00	90.53	177.69	10702.43	-4655.48	260.40	4662.20	0.00	435880.54	737822.29	
15346.59	90.53	177.69	10702.00	-4702.03	262.28	4708.78	0.00	435833.99	737824.17	PBHL 6H

5D Anti-Collision Report**Devon Energy****Field Name:** *Lea Co, NM Nad 83 NMEZ***Site Name:** *Rebel 20 Fed 2H, 6H Pad***Well Name:** *Rebel 20 Fed 6H*

28 May 2015




Weatherford

Rebel 20 Fed 6H

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 Rebel 20 Fed 2H, 6H Pad	Units : US ft	North Reference : Grid	Convergence Angle : 0.34	
	Position	Northing : 440535.45 US ft	Latitude : 32° 12' 34.26"	
		Easting : 737511.90 US ft	Longitude : -103° 41' 56.57"	
	Elevation above Mean Sea Level:3564.00 US ft			
Comment :				
Slot Name Rebel 20 Fed 6H	Position (Offsets relative to Site Centre)			
	+N / -S : 0.57 US ft	Northing :440536.02 US ft	Latitude : 32°12'34.27"	
	+E / -W : 49.99 US ft	Easting :737561.89 US ft	Longitude : -103°41'55.99"	
	Slot TVD Reference : Ground Elevation			
Elevation above Mean Sea Level : 3564.00 US ft				
Comment :				
Well Name Rebel 20 Fed 6H	Type : Main well	UWI :	Plan : Working Plan	
	Rig Height <i>Kelly Bushing</i> : 25.00 US ft	Comment :		
	Relative to Mean Sea Level: 3589.00 US ft			
	Closure Distance : 4709.34 US ft	Closure Azimuth : 176.807°		
	Vertical Section (Position of Origin Relative to Slot)			
	+N / -S : 0.00 US ft	+E / -W : 0.00 US ft	Az :177.69°	
	Magnetic Parameters			
	Model : BGGM	Field Strength : 48210.4nT	Dec : 7.32°	Dip : 60.10°
				Date : 30/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
Rebel 20 Fed 6H (p)	0.00	15346.59	100.00	2

Secondary Well Names

Rebel 20 Fed 2H (p)

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.

SD Anti-Collision Report

Anti Collision Proximity Summary (TVD relative to Kelly Bushing)

Secondary Well Name	Phi MD (US ft)	Sec MD (US ft)	TVD (US ft)	CC (US ft)	ES (US ft)	SF	Risk
Rebel 20 Fed 2H (p)	4814.45	4814.45	4814.45	50.59	28.64	2.30	

Primary Well : Rebel 20 Fed 6H (p) (TVD Relative to Kelly Bushing ; 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
0.00	0.00	269.35	0.00	0.00	Rebel 20 Fed 2H (p)	49.99	49.15	59.33	
100.00	100.00	269.35	0.11	0.11	Rebel 20 Fed 2H (p)	49.99	48.93	47.02	
200.00	200.00	269.35	0.34	0.34	Rebel 20 Fed 2H (p)	49.99	48.48	33.05	
300.00	300.00	269.35	0.56	0.56	Rebel 20 Fed 2H (p)	49.99	48.03	25.48	
400.00	400.00	269.35	0.79	0.79	Rebel 20 Fed 2H (p)	49.99	47.58	20.73	
500.00	500.00	269.35	1.01	1.01	Rebel 20 Fed 2H (p)	49.99	47.13	17.47	
600.00	600.00	269.35	1.24	1.24	Rebel 20 Fed 2H (p)	49.99	46.68	15.10	
700.00	700.00	269.35	1.46	1.46	Rebel 20 Fed 2H (p)	49.99	46.23	13.29	
800.00	800.00	269.35	1.69	1.69	Rebel 20 Fed 2H (p)	49.99	45.78	11.87	
900.00	900.00	269.35	1.91	1.91	Rebel 20 Fed 2H (p)	49.99	45.33	10.73	
1000.00	1000.00	269.35	2.14	2.14	Rebel 20 Fed 2H (p)	49.99	45.04	10.09	
1100.00	1100.00	269.35	2.36	2.36	Rebel 20 Fed 2H (p)	49.99	44.59	9.25	
1200.00	1200.00	269.35	2.59	2.59	Rebel 20 Fed 2H (p)	49.99	44.14	8.54	
1300.00	1300.00	269.35	2.81	2.81	Rebel 20 Fed 2H (p)	49.99	43.69	7.93	
1400.00	1400.00	269.35	3.03	3.03	Rebel 20 Fed 2H (p)	49.99	43.24	7.41	
1500.00	1500.00	269.35	3.26	3.26	Rebel 20 Fed 2H (p)	49.99	42.79	6.94	
1600.00	1600.00	269.35	3.48	3.48	Rebel 20 Fed 2H (p)	49.99	42.34	6.53	
1700.00	1700.00	269.35	3.71	3.71	Rebel 20 Fed 2H (p)	49.99	41.89	6.17	
1800.00	1800.00	269.35	3.93	3.93	Rebel 20 Fed 2H (p)	49.99	41.44	5.85	
1900.00	1900.00	269.35	4.16	4.16	Rebel 20 Fed 2H (p)	49.99	40.99	5.56	
2000.00	2000.00	269.35	4.38	4.38	Rebel 20 Fed 2H (p)	49.99	40.54	5.29	
2100.00	2100.00	269.35	4.61	4.61	Rebel 20 Fed 2H (p)	49.99	40.10	5.05	
2200.00	2200.00	269.35	4.83	4.83	Rebel 20 Fed 2H (p)	49.99	39.65	4.83	
2300.00	2300.00	269.35	5.06	5.06	Rebel 20 Fed 2H (p)	49.99	39.20	4.63	
2400.00	2400.00	269.35	5.28	5.28	Rebel 20 Fed 2H (p)	49.99	38.75	4.45	
2500.00	2500.00	269.35	5.51	5.51	Rebel 20 Fed 2H (p)	49.99	38.30	4.27	
2600.00	2600.00	269.35	5.73	5.73	Rebel 20 Fed 2H (p)	49.99	37.85	4.12	
2700.00	2700.00	269.35	5.96	5.96	Rebel 20 Fed 2H (p)	49.99	37.40	3.97	
2800.00	2800.00	269.35	6.18	6.18	Rebel 20 Fed 2H (p)	49.99	36.95	3.83	
2900.00	2900.00	269.35	6.41	6.41	Rebel 20 Fed 2H (p)	49.99	36.50	3.70	
3000.00	3000.00	269.35	6.63	6.63	Rebel 20 Fed 2H (p)	49.99	36.05	3.59	
3100.00	3100.00	269.35	6.86	6.86	Rebel 20 Fed 2H (p)	49.99	35.60	3.47	

SD Anti-Collision Report

Primary Well : Rebel 20 Fed 6H (p) (TVD Relative to Kelly Bushing ; 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)	SI	Risk
3200.00	3200.00	269.35	7.08	7.08	Rebel 20 Fed 2H (p)	49.99	35.15	3.37	
3300.00	3300.00	269.35	7.31	7.31	Rebel 20 Fed 2H (p)	49.99	34.70	3.27	
3400.00	3400.00	269.35	7.53	7.53	Rebel 20 Fed 2H (p)	49.99	34.25	3.18	
3500.00	3500.00	269.35	7.76	7.76	Rebel 20 Fed 2H (p)	49.99	33.80	3.09	
3600.00	3600.00	269.35	7.98	7.98	Rebel 20 Fed 2H (p)	49.99	33.35	3.00	
3700.00	3700.00	269.35	8.20	8.20	Rebel 20 Fed 2H (p)	49.99	32.90	2.93	
3800.00	3800.00	269.35	8.43	8.43	Rebel 20 Fed 2H (p)	49.99	32.45	2.85	
3900.00	3900.00	269.35	8.65	8.65	Rebel 20 Fed 2H (p)	49.99	32.00	2.78	
4000.00	4000.00	269.35	8.88	8.88	Rebel 20 Fed 2H (p)	49.99	31.55	2.71	
4100.00	4100.00	269.35	9.10	9.10	Rebel 20 Fed 2H (p)	49.99	31.10	2.65	
4200.00	4200.00	269.35	9.33	9.33	Rebel 20 Fed 2H (p)	49.99	30.65	2.59	
4300.00	4300.00	269.35	9.55	9.55	Rebel 20 Fed 2H (p)	49.99	30.21	2.53	
4400.00	4400.00	269.35	9.78	9.78	Rebel 20 Fed 2H (p)	49.99	29.76	2.47	
4500.00	4500.00	269.35	10.00	10.00	Rebel 20 Fed 2H (p)	49.99	29.31	2.42	
4600.00	4600.00	269.35	10.23	10.23	Rebel 20 Fed 2H (p)	49.99	28.86	2.37	
4700.00	4700.00	269.35	10.45	10.45	Rebel 20 Fed 2H (p)	49.99	28.53	2.33	
4800.00	4799.99	238.50	10.68	10.67	Rebel 20 Fed 2H (p)	50.44	28.56	2.30	
4900.00	4899.96	236.04	10.90	10.89	Rebel 20 Fed 2H (p)	51.86	29.53	2.32	
5000.00	4999.86	232.25	11.12	11.10	Rebel 20 Fed 2H (p)	54.42	31.62	2.39	
5100.00	5099.68	227.54	11.34	11.31	Rebel 20 Fed 2H (p)	58.36	35.12	2.51	
5200.00	5199.37	222.39	11.56	11.52	Rebel 20 Fed 2H (p)	63.92	40.24	2.70	
5300.00	5298.99	217.63	11.78	11.74	Rebel 20 Fed 2H (p)	70.61	46.53	2.93	
5400.00	5398.60	213.70	12.01	11.96	Rebel 20 Fed 2H (p)	77.71	53.15	3.16	
5500.00	5498.22	210.45	12.24	12.18	Rebel 20 Fed 2H (p)	85.10	60.08	3.40	
5600.00	5597.84	207.72	12.47	12.40	Rebel 20 Fed 2H (p)	92.73	67.28	3.64	
5700.00	5697.46	205.41	12.70	12.63	Rebel 20 Fed 2H (p)	100.53	74.69	3.89	
5800.00	5797.08	203.44	12.93	12.85	Rebel 20 Fed 2H (p)	108.47	82.17	4.12	
5900.00	5896.70	201.73	13.17	13.07	Rebel 20 Fed 2H (p)	116.53	89.77	4.35	
6000.00	5996.32	200.25	13.40	13.30	Rebel 20 Fed 2H (p)	124.67	97.45	4.58	
6100.00	6095.98	199.00	13.61	13.50	Rebel 20 Fed 2H (p)	132.47	104.81	4.79	
6200.00	6195.70	198.00	13.80	13.69	Rebel 20 Fed 2H (p)	139.50	111.43	4.97	
6300.00	6295.49	197.19	13.99	13.87	Rebel 20 Fed 2H (p)	145.74	117.27	5.12	
6400.00	6395.33	196.55	14.17	14.05	Rebel 20 Fed 2H (p)	151.16	122.30	5.24	
6500.00	6495.21	196.04	14.36	14.23	Rebel 20 Fed 2H (p)	155.77	126.52	5.33	
6600.00	6595.13	195.65	14.54	14.41	Rebel 20 Fed 2H (p)	159.55	129.90	5.38	
6700.00	6695.09	195.35	14.73	14.59	Rebel 20 Fed 2H (p)	162.49	132.45	5.41	

SD Anti-Collision Report

Primary Well : Rebel 20 Fed 6H (p) (TVD Relative to Kelly Bushing ; 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
6800.00	6795.06	195.15	14.91	14.77	Rebel 20 Fed 2H (p)	164.59	134.15	5.41	
6900.00	6895.05	195.03	15.09	14.95	Rebel 20 Fed 2H (p)	165.86	135.01	5.38	
7000.00	6995.05	224.99	15.28	15.13	Rebel 20 Fed 2H (p)	166.28	135.03	5.32	
7100.00	7095.05	224.99	15.48	15.33	Rebel 20 Fed 2H (p)	166.28	134.61	5.25	
7200.00	7195.05	224.99	15.70	15.56	Rebel 20 Fed 2H (p)	166.28	134.16	5.18	
7300.00	7295.05	224.99	15.92	15.78	Rebel 20 Fed 2H (p)	166.28	133.71	5.11	
7400.00	7395.05	224.99	16.14	16.00	Rebel 20 Fed 2H (p)	166.28	133.26	5.04	
7500.00	7495.05	224.99	16.36	16.23	Rebel 20 Fed 2H (p)	166.28	132.82	4.97	
7600.00	7595.05	224.99	16.58	16.45	Rebel 20 Fed 2H (p)	166.28	132.37	4.90	
7700.00	7695.05	224.99	16.80	16.67	Rebel 20 Fed 2H (p)	166.28	131.92	4.84	
7800.00	7795.05	224.99	17.03	16.90	Rebel 20 Fed 2H (p)	166.28	131.47	4.78	
7900.00	7895.05	224.38	17.25	17.12	Rebel 20 Fed 2H (p)	168.35	133.17	4.78	
8000.00	7995.05	221.36	17.47	17.34	Rebel 20 Fed 2H (p)	180.17	145.00	5.12	
8100.00	8095.05	216.90	17.69	17.57	Rebel 20 Fed 2H (p)	203.26	168.29	5.81	
8200.00	8195.05	212.28	17.91	17.79	Rebel 20 Fed 2H (p)	237.98	203.73	6.95	
8300.00	8295.05	208.22	18.14	18.01	Rebel 20 Fed 2H (p)	283.64	250.12	8.46	
8400.00	8395.05	204.93	18.36	18.24	Rebel 20 Fed 2H (p)	338.75	306.19	10.40	
8500.00	8495.05	202.35	18.58	18.46	Rebel 20 Fed 2H (p)	401.66	369.92	12.65	
8600.00	8595.05	200.34	18.80	18.69	Rebel 20 Fed 2H (p)	470.83	439.91	15.23	
8700.00	8695.05	198.77	19.02	18.91	Rebel 20 Fed 2H (p)	544.99	514.70	17.99	
8800.00	8795.05	197.51	19.25	19.13	Rebel 20 Fed 2H (p)	623.14	593.33	20.91	
8900.00	8895.05	196.51	19.47	19.36	Rebel 20 Fed 2H (p)	704.50	675.17	24.02	
9000.00	8995.05	195.69	19.69	19.58	Rebel 20 Fed 2H (p)	788.45	759.47	27.21	
9100.00	9095.05	195.01	19.91	19.80	Rebel 20 Fed 2H (p)	874.51	845.76	30.42	
9200.00	9195.05	194.44	20.14	20.03	Rebel 20 Fed 2H (p)	962.33	933.77	33.69	
9300.00	9295.05	193.97	20.36	20.25	Rebel 20 Fed 2H (p)	1051.60	1023.20	37.03	
9400.00	9395.05	193.56	20.58	20.48	Rebel 20 Fed 2H (p)	1142.08	1113.76	40.33	
9500.00	9495.05	193.20	20.80	20.70	Rebel 20 Fed 2H (p)	1233.59	1205.31	43.62	
9600.00	9595.05	192.89	21.03	20.92	Rebel 20 Fed 2H (p)	1325.97	1297.67	46.85	
9700.00	9695.05	192.62	21.25	21.15	Rebel 20 Fed 2H (p)	1419.11	1390.76	50.05	
9800.00	9795.05	192.39	21.47	21.37	Rebel 20 Fed 2H (p)	1512.89	1484.48	53.25	
9900.00	9895.05	192.17	21.70	21.59	Rebel 20 Fed 2H (p)	1607.24	1578.76	56.43	
10000.00	9995.05	191.99	21.92	21.82	Rebel 20 Fed 2H (p)	1702.07	1673.49	59.55	
10100.00	10095.05	191.82	22.14	22.04	Rebel 20 Fed 2H (p)	1797.34	1768.61	62.57	
10200.00	10195.05	191.66	22.36	22.27	Rebel 20 Fed 2H (p)	1892.99	1864.11	65.56	
10300.00	10294.80	9.38	22.53	22.31	Rebel 20 Fed 2H (p)	1987.34	1958.33	68.51	

5D Anti-Collision Report

Primary Well : Rebel 20 Fed 6H (p) (TVD Relative to Kelly Bushing ; 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
10400.00	10391.84	6.55	22.66	21.94	Rebel 20 Fed 2H (p)	2074.88	2045.80	71.34	
10500.00	10482.60	5.11	22.76	21.24	Rebel 20 Fed 2H (p)	2153.05	2123.93	73.93	
10600.00	10563.76	4.28	22.87	20.24	Rebel 20 Fed 2H (p)	2219.87	2190.77	76.29	
10700.00	10632.32	3.77	23.06	19.07	Rebel 20 Fed 2H (p)	2273.74	2244.61	78.05	
10800.00	10685.78	3.47	23.29	18.01	Rebel 20 Fed 2H (p)	2313.48	2284.36	79.46	
10900.00	10722.17	3.31	23.62	17.26	Rebel 20 Fed 2H (p)	2338.21	2309.07	80.24	
11000.00	10740.14	3.25	24.10	16.88	Rebel 20 Fed 2H (p)	2347.41	2318.24	80.47	
11100.00	10741.52	3.27	24.63	17.03	Rebel 20 Fed 2H (p)	2343.37	2314.08	80.00	
11200.00	10740.59	3.28	25.27	17.18	Rebel 20 Fed 2H (p)	2340.44	2310.99	79.48	
11300.00	10739.66	3.34	26.06	17.36	Rebel 20 Fed 2H (p)	2339.15	2309.27	78.29	
11400.00	10738.73	3.39	26.98	17.57	Rebel 20 Fed 2H (p)	2337.86	2307.47	76.93	
11500.00	10737.80	3.44	27.98	17.82	Rebel 20 Fed 2H (p)	2336.57	2305.60	75.44	
11600.00	10736.87	3.50	29.07	18.12	Rebel 20 Fed 2H (p)	2335.28	2303.67	73.87	
11700.00	10735.94	3.55	30.22	18.43	Rebel 20 Fed 2H (p)	2334.00	2301.69	72.24	
11800.00	10735.01	3.60	31.44	18.77	Rebel 20 Fed 2H (p)	2332.72	2299.66	70.56	
11900.00	10734.08	3.66	32.71	19.12	Rebel 20 Fed 2H (p)	2331.44	2297.58	68.86	
12000.00	10733.15	3.71	34.04	19.50	Rebel 20 Fed 2H (p)	2330.16	2295.47	67.16	
12100.00	10732.22	3.76	35.41	19.88	Rebel 20 Fed 2H (p)	2328.88	2293.32	65.49	
12200.00	10731.29	3.81	36.82	20.26	Rebel 20 Fed 2H (p)	2327.61	2291.16	63.85	
12300.00	10730.36	3.87	38.27	20.66	Rebel 20 Fed 2H (p)	2326.34	2288.92	62.18	
12400.00	10729.43	3.92	39.75	21.15	Rebel 20 Fed 2H (p)	2325.07	2286.61	60.46	
12500.00	10728.49	3.97	41.26	21.61	Rebel 20 Fed 2H (p)	2323.80	2284.33	58.88	
12600.00	10727.56	4.03	42.79	22.06	Rebel 20 Fed 2H (p)	2322.53	2282.07	57.40	
12700.00	10726.63	4.08	44.35	22.55	Rebel 20 Fed 2H (p)	2321.27	2279.68	55.82	
12800.00	10725.70	4.14	45.93	23.08	Rebel 20 Fed 2H (p)	2320.01	2277.31	54.34	
12900.00	10724.77	4.19	47.53	23.59	Rebel 20 Fed 2H (p)	2318.75	2274.91	52.90	
13000.00	10723.84	4.24	49.15	24.07	Rebel 20 Fed 2H (p)	2317.49	2272.53	51.54	
13100.00	10722.91	4.30	50.78	24.62	Rebel 20 Fed 2H (p)	2316.23	2270.12	50.23	
13200.00	10721.98	4.35	52.42	25.17	Rebel 20 Fed 2H (p)	2314.98	2267.66	48.93	
13300.00	10721.05	4.40	54.08	25.74	Rebel 20 Fed 2H (p)	2313.73	2265.15	47.63	
13400.00	10720.12	4.46	55.75	26.25	Rebel 20 Fed 2H (p)	2312.48	2262.71	46.46	
13500.00	10719.19	4.51	57.43	26.82	Rebel 20 Fed 2H (p)	2311.23	2260.23	45.32	
13600.00	10718.26	4.57	59.12	27.44	Rebel 20 Fed 2H (p)	2309.98	2257.67	44.16	
13700.00	10717.33	4.62	60.81	28.04	Rebel 20 Fed 2H (p)	2308.74	2255.13	43.07	
13800.00	10716.39	4.67	62.52	28.64	Rebel 20 Fed 2H (p)	2307.50	2252.60	42.03	
13900.00	10715.46	4.73	64.23	29.23	Rebel 20 Fed 2H (p)	2306.26	2250.06	41.04	

5D Anti-Collision Report

Primary Well : Rebel 20 Fed 6H (p) (TVD Relative to Kelly Bushing ; 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)	SI	Risk
14000.00	10714.53	4.78	65.95	29.83	Rebel 20 Fed 2H (p)	2305.02	2247.52	40.09	
14100.00	10713.60	4.84	67.68	30.42	Rebel 20 Fed 2H (p)	2303.78	2244.98	39.18	
14200.00	10712.67	4.89	69.41	31.02	Rebel 20 Fed 2H (p)	2302.55	2242.43	38.30	
14300.00	10711.74	4.95	71.15	31.62	Rebel 20 Fed 2H (p)	2301.32	2239.88	37.45	
14400.00	10710.81	5.00	72.90	32.23	Rebel 20 Fed 2H (p)	2300.09	2237.32	36.64	
14500.00	10709.88	5.06	74.64	32.84	Rebel 20 Fed 2H (p)	2298.86	2234.75	35.86	
14600.00	10708.95	5.11	76.40	33.46	Rebel 20 Fed 2H (p)	2297.64	2232.18	35.10	
14700.00	10708.02	5.16	78.15	34.10	Rebel 20 Fed 2H (p)	2296.42	2229.61	34.37	
14800.00	10707.09	5.22	79.91	34.76	Rebel 20 Fed 2H (p)	2295.19	2227.01	33.66	
14900.00	10706.16	5.27	81.68	35.41	Rebel 20 Fed 2H (p)	2293.98	2224.40	32.97	
15000.00	10705.23	5.33	83.44	36.07	Rebel 20 Fed 2H (p)	2292.76	2221.78	32.30	
15100.00	10704.30	5.38	85.21	36.73	Rebel 20 Fed 2H (p)	2291.54	2219.16	31.66	
15200.00	10703.36	5.44	86.99	37.39	Rebel 20 Fed 2H (p)	2290.33	2216.54	31.04	
15300.00	10702.43	5.49	88.76	38.05	Rebel 20 Fed 2H (p)	2289.12	2213.92	30.44	
15346.59	10702.00	5.51	89.59	38.36	Rebel 20 Fed 2H (p)	2288.59	2212.80	30.20	

Secondary Well : Rebel 20 Fed 2H (p) (TVD Relative to Kelly Bushing (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)	SI	Risk
0.00	0.00	0.00	269.35	0.00	0.00	49.99	49.15	59.33	
100.00	100.00	100.00	269.35	0.11	0.11	49.99	48.93	47.02	
200.00	200.00	200.00	269.35	0.34	0.34	49.99	48.48	33.05	
300.00	300.00	300.00	269.35	0.56	0.56	49.99	48.03	25.48	
400.00	400.00	400.00	269.35	0.79	0.79	49.99	47.58	20.73	
500.00	500.00	500.00	269.35	1.01	1.01	49.99	47.13	17.47	
600.00	600.00	600.00	269.35	1.24	1.24	49.99	46.68	15.10	
700.00	700.00	700.00	269.35	1.46	1.46	49.99	46.23	13.29	
800.00	800.00	800.00	269.35	1.69	1.69	49.99	45.78	11.87	
900.00	900.00	900.00	269.35	1.91	1.91	49.99	45.33	10.73	
1000.00	1000.00	1000.00	269.35	2.14	2.14	49.99	45.04	10.09	
1100.00	1100.00	1100.00	269.35	2.36	2.36	49.99	44.59	9.25	
1200.00	1200.00	1200.00	269.35	2.59	2.59	49.99	44.14	8.54	
1300.00	1300.00	1300.00	269.35	2.81	2.81	49.99	43.69	7.93	
1400.00	1400.00	1400.00	269.35	3.03	3.03	49.99	43.24	7.41	
1500.00	1500.00	1500.00	269.35	3.26	3.26	49.99	42.79	6.94	
1600.00	1600.00	1600.00	269.35	3.48	3.48	49.99	42.34	6.53	
1700.00	1700.00	1700.00	269.35	3.71	3.71	49.99	41.89	6.17	
1800.00	1800.00	1800.00	269.35	3.93	3.93	49.99	41.44	5.85	
1900.00	1900.00	1900.00	269.35	4.16	4.16	49.99	40.99	5.56	
2000.00	2000.00	2000.00	269.35	4.38	4.38	49.99	40.54	5.29	
2100.00	2100.00	2100.00	269.35	4.61	4.61	49.99	40.10	5.05	
2200.00	2200.00	2200.00	269.35	4.83	4.83	49.99	39.65	4.83	
2300.00	2300.00	2300.00	269.35	5.06	5.06	49.99	39.20	4.63	
2400.00	2400.00	2400.00	269.35	5.28	5.28	49.99	38.75	4.45	
2500.00	2500.00	2500.00	269.35	5.51	5.51	49.99	38.30	4.27	
2600.00	2600.00	2600.00	269.35	5.73	5.73	49.99	37.85	4.12	
2700.00	2700.00	2700.00	269.35	5.96	5.96	49.99	37.40	3.97	
2800.00	2800.00	2800.00	269.35	6.18	6.18	49.99	36.95	3.83	
2900.00	2900.00	2900.00	269.35	6.41	6.41	49.99	36.50	3.70	

5D Anti-Collision Report

Secondary Well : Rebel 20 Fed 2H (p) (TVD Relative to Kelly Bushing (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
3000.00	3000.00	3000.00	269.35	6.63	6.63	49.99	36.05	3.59	
3100.00	3100.00	3100.00	269.35	6.86	6.86	49.99	35.60	3.47	
3200.00	3200.00	3200.00	269.35	7.08	7.08	49.99	35.15	3.37	
3300.00	3300.00	3300.00	269.35	7.31	7.31	49.99	34.70	3.27	
3400.00	3400.00	3400.00	269.35	7.53	7.53	49.99	34.25	3.18	
3500.00	3500.00	3500.00	269.35	7.76	7.76	49.99	33.80	3.09	
3600.00	3600.00	3600.00	269.35	7.98	7.98	49.99	33.35	3.00	
3700.00	3700.00	3700.00	269.35	8.20	8.20	49.99	32.90	2.93	
3800.00	3800.00	3800.00	269.35	8.43	8.43	49.99	32.45	2.85	
3900.00	3900.00	3900.00	269.35	8.65	8.65	49.99	32.00	2.78	
4000.00	4000.00	4000.00	269.35	8.88	8.88	49.99	31.55	2.71	
4100.00	4100.00	4100.00	269.35	9.10	9.10	49.99	31.10	2.65	
4200.00	4200.00	4200.00	269.35	9.33	9.33	49.99	30.65	2.59	
4300.00	4300.00	4300.00	269.35	9.55	9.55	49.99	30.21	2.53	
4400.00	4400.00	4400.00	269.35	9.78	9.78	49.99	29.76	2.47	
4500.00	4500.00	4500.00	269.35	10.00	10.00	49.99	29.31	2.42	
4600.00	4600.00	4600.00	269.35	10.23	10.23	49.99	28.86	2.37	
4700.00	4700.00	4700.00	269.35	10.45	10.45	49.99	28.53	2.33	
4800.00	4799.99	4799.99	238.50	10.68	10.68	50.44	28.56	2.30	
4900.00	4899.96	4899.96	236.04	10.90	10.90	51.86	29.53	2.32	
5000.00	4999.86	4999.86	232.25	11.13	11.13	54.42	31.62	2.39	
5100.00	5099.68	5099.68	227.54	11.35	11.35	58.36	35.12	2.51	
5200.00	5199.37	5199.37	222.39	11.58	11.58	63.92	40.24	2.70	
5300.00	5298.99	5298.99	217.63	11.80	11.80	70.61	46.53	2.93	
5400.00	5398.60	5398.60	213.70	12.02	12.02	77.71	53.15	3.16	
5500.00	5498.22	5498.22	210.45	12.25	12.25	85.10	60.08	3.40	
5600.00	5597.84	5597.84	207.72	12.47	12.47	92.73	67.28	3.64	
5700.00	5697.46	5697.46	205.41	12.69	12.69	100.53	74.69	3.89	
5800.00	5797.08	5797.08	203.44	12.92	12.92	108.47	82.17	4.12	
5900.00	5896.70	5896.70	201.73	13.14	13.14	116.53	89.77	4.35	
6000.00	5996.32	5996.32	200.25	13.37	13.37	124.67	97.45	4.58	
6100.00	6095.98	6095.98	199.00	13.59	13.59	132.47	104.81	4.79	
6200.00	6195.70	6195.70	198.00	13.81	13.81	139.50	111.43	4.97	
6300.00	6295.49	6295.49	197.19	14.04	14.04	145.74	117.27	5.12	
6400.00	6395.33	6395.33	196.55	14.26	14.26	151.16	122.30	5.24	
6500.00	6495.21	6495.21	196.04	14.49	14.49	155.77	126.52	5.33	
6600.00	6595.13	6595.13	195.65	14.71	14.71	159.55	129.90	5.38	
6700.00	6695.09	6695.09	195.35	14.94	14.94	162.49	132.45	5.41	
6800.00	6795.06	6795.06	195.15	15.16	15.16	164.59	134.15	5.41	
6900.00	6895.05	6895.05	195.03	15.39	15.39	165.86	135.01	5.38	
7000.00	6995.05	6995.05	224.99	15.61	15.61	166.28	135.03	5.32	
7100.00	7095.05	7095.05	224.99	15.84	15.84	166.28	134.61	5.25	
7200.00	7195.05	7195.05	224.99	16.06	16.06	166.28	134.16	5.18	
7300.00	7295.05	7295.05	224.99	16.29	16.29	166.28	133.71	5.11	
7400.00	7395.05	7395.05	224.99	16.51	16.51	166.28	133.26	5.04	
7500.00	7495.05	7495.05	224.99	16.74	16.74	166.28	132.82	4.97	
7600.00	7595.05	7595.05	224.99	16.96	16.96	166.28	132.37	4.90	
7700.00	7695.05	7695.05	224.99	17.19	17.19	166.28	131.92	4.84	
7800.00	7795.05	7795.05	224.99	17.41	17.41	166.28	131.47	4.78	
7900.00	7884.10	7884.18	224.38	17.59	17.52	168.35	133.17	4.78	
8000.00	7963.87	7965.08	221.36	17.72	17.41	180.17	145.00	5.12	
8100.00	8036.26	8040.92	216.90	17.85	17.07	203.26	168.29	5.81	
8200.00	8098.93	8109.79	212.28	17.96	16.64	237.98	203.73	6.95	
8300.00	8151.34	8170.93	208.22	18.09	16.13	283.64	250.12	8.46	
8400.00	8194.22	8224.40	204.93	18.20	15.62	338.75	306.19	10.40	
8500.00	8228.87	8270.79	202.35	18.34	15.16	401.66	369.92	12.65	
8600.00	8256.75	8310.92	200.34	18.46	14.69	470.83	439.91	15.23	
8700.00	8279.21	8345.66	198.77	18.59	14.33	544.99	514.70	17.99	

5D Anti-Collision Report

Secondary Well : Rebel 20 Fed 2H (p) (TVD Relative to Kelly Bushing (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
8800.00	8297.36	8375.81	197.51	18.71	14.01	623.14	593.33	20.91	
8900.00	8312.14	8402.09	196.51	18.81	13.70	704.50	675.17	24.02	
9000.00	8324.25	8425.11	195.69	18.93	13.43	788.45	759.47	27.21	
9100.00	8334.25	8445.37	195.01	19.03	13.25	874.51	845.76	30.42	
9200.00	8342.58	8463.31	194.44	19.12	13.08	962.33	933.77	33.69	
9300.00	8349.57	8479.27	193.97	19.20	12.92	1051.60	1023.20	37.03	
9400.00	8355.48	8493.53	193.56	19.27	12.76	1142.08	1113.76	40.33	
9500.00	8360.51	8506.35	193.20	19.34	12.63	1233.59	1205.31	43.62	
9600.00	8364.82	8517.92	192.89	19.42	12.55	1325.97	1297.67	46.85	
9700.00	8368.54	8528.40	192.62	19.49	12.48	1419.11	1390.76	50.05	
9800.00	8371.77	8537.93	192.39	19.55	12.40	1512.89	1484.48	53.25	
9900.00	8374.59	8546.64	192.17	19.61	12.34	1607.24	1578.76	56.43	
10000.00	8377.06	8554.63	191.99	19.66	12.27	1702.07	1673.49	59.55	
10100.00	8379.24	8561.96	191.82	19.70	12.21	1797.34	1768.61	62.57	
10200.00	8381.17	8568.73	191.66	19.75	12.15	1892.99	1864.11	65.56	
10300.00	8383.18	8576.11	9.38	19.79	12.09	1987.34	1958.33	68.51	
10400.00	8385.90	8586.64	6.55	19.86	12.03	2074.88	2045.80	71.34	
10500.00	8389.06	8599.88	5.11	19.95	11.97	2153.05	2123.93	73.93	
10600.00	8392.35	8615.30	4.28	20.07	11.90	2219.87	2190.77	76.29	
10700.00	8395.54	8632.40	3.77	20.20	11.82	2273.74	2244.61	78.05	
10800.00	8398.39	8650.73	3.47	20.34	11.73	2313.48	2284.36	79.46	
10900.00	8400.74	8669.87	3.31	20.49	11.71	2338.21	2309.07	80.24	
11000.00	8402.50	8689.43	3.25	20.64	11.68	2347.41	2318.24	80.47	
11100.00	8403.59	8709.06	3.27	20.80	11.64	2343.37	2314.08	80.00	
11200.00	8404.01	8730.56	3.28	20.99	11.68	2340.44	2310.99	79.48	
11300.00	8404.50	8830.53	3.34	21.93	11.91	2339.15	2309.27	78.29	
11400.00	8404.98	8930.50	3.39	22.97	12.18	2337.86	2307.47	76.93	
11500.00	8405.46	9030.47	3.44	24.10	12.48	2336.57	2305.60	75.44	
11600.00	8405.95	9130.44	3.50	25.32	12.82	2335.28	2303.67	73.87	
11700.00	8406.43	9230.41	3.55	26.60	13.19	2334.00	2301.69	72.24	
11800.00	8406.91	9330.37	3.60	27.95	13.59	2332.72	2299.66	70.56	
11900.00	8407.40	9430.34	3.66	29.35	14.02	2331.44	2297.58	68.86	
12000.00	8407.88	9530.31	3.71	30.79	14.46	2330.16	2295.47	67.16	
12100.00	8408.36	9630.28	3.76	32.28	14.93	2328.88	2293.32	65.49	
12200.00	8408.85	9730.25	3.81	33.80	15.42	2327.61	2291.16	63.85	
12300.00	8409.33	9830.22	3.87	35.34	15.92	2326.34	2288.92	62.18	
12400.00	8409.81	9930.19	3.92	36.92	16.46	2325.07	2286.61	60.46	
12500.00	8410.30	10030.15	3.97	38.52	17.03	2323.80	2284.33	58.88	
12600.00	8410.78	10130.12	4.03	40.14	17.61	2322.53	2282.07	57.40	
12700.00	8411.26	10230.09	4.08	41.77	18.15	2321.27	2279.68	55.82	
12800.00	8411.75	10330.06	4.14	43.42	18.75	2320.01	2277.31	54.34	
12900.00	8412.23	10430.03	4.19	45.09	19.33	2318.75	2274.91	52.90	
13000.00	8412.72	10530.00	4.24	46.77	19.95	2317.49	2272.53	51.54	
13100.00	8413.20	10629.96	4.30	48.45	20.51	2316.23	2270.12	50.23	
13200.00	8413.68	10729.93	4.35	50.15	21.14	2314.98	2267.66	48.93	
13300.00	8414.17	10829.90	4.40	51.86	21.78	2313.73	2265.15	47.63	
13400.00	8414.65	10929.87	4.46	53.58	22.42	2312.48	2262.71	46.46	
13500.00	8415.13	11029.84	4.51	55.30	23.07	2311.23	2260.23	45.32	
13600.00	8415.62	11129.81	4.57	57.03	23.72	2309.98	2257.67	44.16	
13700.00	8416.10	11229.78	4.62	58.77	24.37	2308.74	2255.13	43.07	
13800.00	8416.58	11329.74	4.67	60.51	25.02	2307.50	2252.60	42.03	
13900.00	8417.07	11429.71	4.73	62.26	25.68	2306.26	2250.06	41.04	
14000.00	8417.55	11529.68	4.78	64.01	26.34	2305.02	2247.52	40.09	
14100.00	8418.03	11629.65	4.84	65.77	27.01	2303.78	2244.98	39.18	
14200.00	8418.52	11729.62	4.89	67.53	27.68	2302.55	2242.43	38.30	
14300.00	8419.00	11829.59	4.95	69.30	28.35	2301.32	2239.88	37.45	
14400.00	8419.48	11929.55	5.00	71.07	29.03	2300.09	2237.32	36.64	
14500.00	8419.97	12029.52	5.06	72.84	29.70	2298.86	2234.75	35.86	

SD Anti-Collision Report

Secondary Well : Rebel 20 Fed 2H (p) (TVD Relative to Kelly Bushing (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)	SI	Risk
14600.00	8420.45	12129.49	5.11	74.61	30.38	2297.64	2232.18	35.10	
14700.00	8420.94	12229.46	5.16	76.39	31.07	2296.42	2229.61	34.37	
14800.00	8421.42	12329.43	5.22	78.17	31.75	2295.19	2227.01	33.66	
14900.00	8421.90	12429.40	5.27	79.95	32.44	2293.98	2224.40	32.97	
15000.00	8422.39	12529.37	5.33	81.74	33.13	2292.76	2221.78	32.30	
15100.00	8422.87	12629.33	5.38	83.52	33.82	2291.54	2219.16	31.66	
15200.00	8423.35	12729.30	5.44	85.31	34.51	2290.33	2216.54	31.04	
15300.00	8423.84	12829.27	5.49	87.10	35.20	2289.12	2213.92	30.44	
15346.59	8424.00	12863.13	5.51	87.71	35.44	2288.59	2212.80	30.20	

**Weatherford**

Weatherford Drilling Services

GeoDec4 v2.1.0.0

Report Date: May 28, 2015

Job Number: _____

Customer: Devon Energy

Well Name: Rebel 20 Fed 6H

API Number: _____

Rig Name: _____

Location: Lea Co, NM Nad83 NME

Block: _____

Engineer: RWJ

NAD83 / New Mexico East (ftUS)

Projected Coordinate System

Datum: North American Datum 1983 (1986)

Ellipsoid: GRS 1980

EPSG: 2257

North: 440536.02 US Survey Foot

East: 737561.89 US Survey Foot

Convergence: 0.34°

Declination: 7.32°

Total Correction: 6.98°

Datum Transformation: none

NAD83 (1986)

Geodetic Coordinate System

Datum: North American Datum 1983 (1986)

Ellipsoid: GRS 1980

EPSG: 4269

Latitude: 32.209518 Degree

Longitude: -103.698886 Degree

Geodetic Location WGS84

MSL Elevation = 0 m

Latitude = 32° 12' 34.27" N

Longitude = 103° 41' 55.99" W

Magnetic Declination = 7.32 deg

Local Gravity = .9988 g

Local Field Strength = 48210 nT

Magnetic Dip = 60.10 deg

Magnetic Model = bggm2015.dat

Run Date = July 30, 2015

[True North Offset]

Checksum = 6532

Magnetic Vector X = 23836 nT

Magnetic Vector Y = 3064 nT

Magnetic Vector Z = 41794 nT

Magnetic Vector H = 24032 nT

Signed: _____

Date: _____

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