



July 10, 2017

Devon Energy Corporation
20 N. Broadway
Oklahoma City, Oklahoma 73102

Attn: Ian Norwalk

**NM OIL CONSERVATION
ARTESIA DISTRICT**

FEB 20 2018

RECEIVED

Re: Final Directional Report
Agate PWU 21-22 9H
Eddy County, NM 30-015-44116

Mr. Norwalk,

Included in this report are a directional comparison plot and final survey report, ~~daily directional drilling reports, and final BHA reports.~~

The report covers the following:

LEAM Job #: MD-170444 for the (OH) from June 11, 2017 to June 24, 2017;
Drilling start depth of 293' MD to 18,780' total MD.

We appreciate you giving LEAM Drilling Services the opportunity of doing business with you and look forward to working with you in the future.

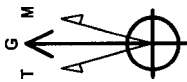
Regards,

Nora Tucker
Well Planner - Manager

LEAM Drilling Services

Devon Energy

Project: Eddy County, NM (NAD-83)
 Site: Agate PWU 21-22
 Well: 9H
 Wellbore: OH
 Design: OH

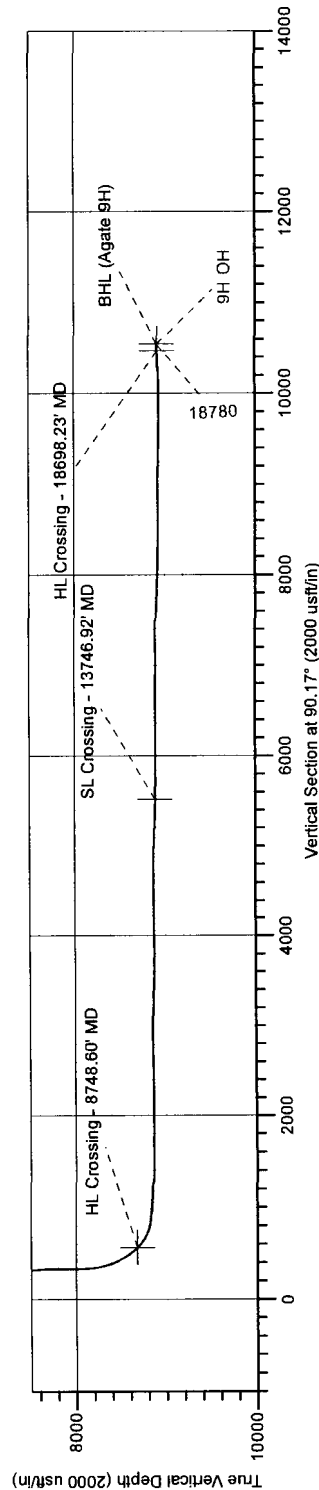
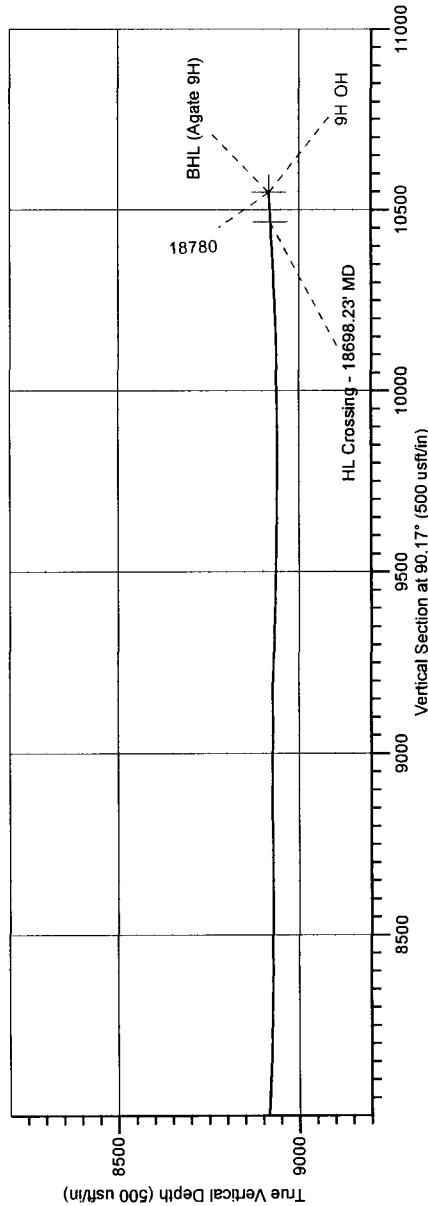
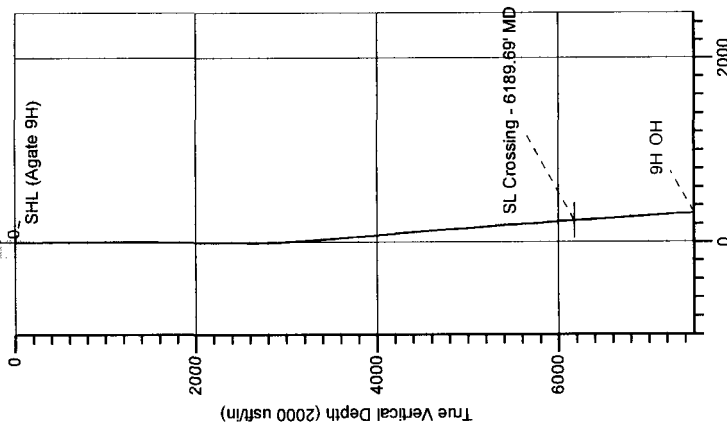


Azimuths to Grid North
 True North: -0.13°
 Magnetic North: 7.35°
 Magnetic Field
 Strength: 48227.8nT
 Dip Angle: 60.52°
 Date: 4/11/2017
 Model: HDGM

PROJECT DETAILS: Eddy County, NM (NAD-83)
 Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone



3334.2' GE + 23.5' KB @ 3357.70usft
 Ground Level: 3334.20



NM OIL CONSERVATION
 ARTESIA DISTRICT

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DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Latitude	Longitude
BHL (Agate 9H)	197.39	10548.51	32° 39' 8.8449 N	104° 3' 17.5003 W
HL Crossing - 18698.23' MD	197.59	10466.85	32° 39' 8.8490 N	104° 3' 18.4554 W
HL Crossing - 8748.60' MD	195.62	564.85	32° 39' 9.0713 N	104° 5' 14.2774 W
SHL (Agate 9H)	0.00	0.00	32° 39' 7.1485 N	104° 5' 20.8896 W
SL Crossing - 13746.92' MD	8891.13	206.65	32° 39' 9.0632 N	104° 4' 16.3409 W
SL Crossing - 6189.69' MD	6177.98	153.78	32° 39' 8.6647 N	104° 5' 18.1367 W



LEAM
 Drilling Services

LEAM DRILLING SYSTEMS LLC
 2010 East Davis, Conroe, Texas 77301
 Phone: 936/756-7577, Fax: 936/756-7595

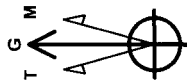
Design: OH (SH/OH)
 Agate PWU 21-22
 Created By: Dustin Ault
 Date: 9/24, October 06 2017
 Approved: _____
 Date: _____

Devon Energy

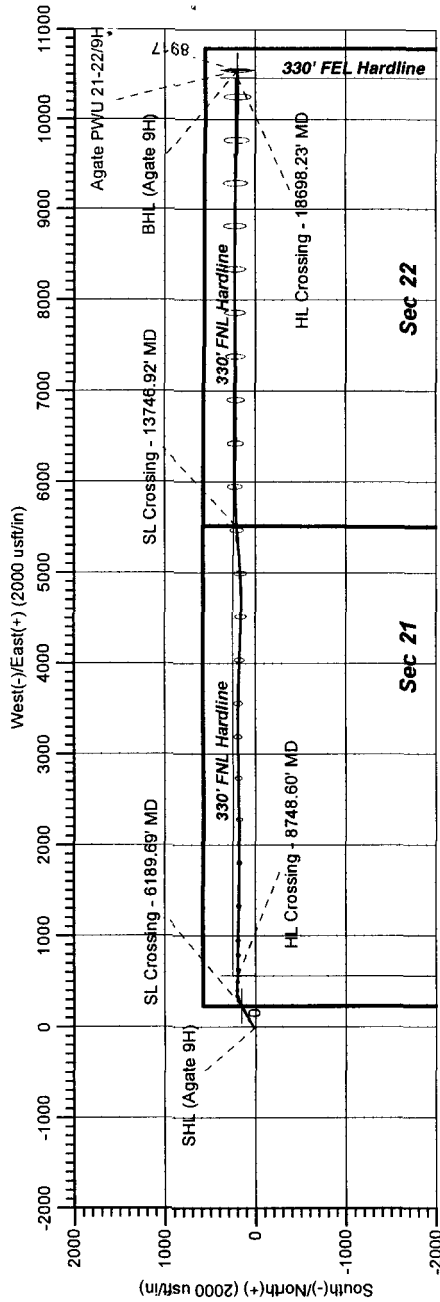
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devon



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DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Eastings	Latitude	Longitude
SHL (Agate 9H)	0.00	0.00	601009.77	616495.30	32° 39' 7.1485 N	104° 5' 20.8896 W
SL Crossing - 6189.69' MD	153.76	235.00	601163.53	616730.30	32° 39' 8.6647 N	104° 5' 18.1387 W
HL Crossing - 8748.60' MD	195.62	584.85	601205.39	617060.15	32° 39' 9.0713 N	104° 5' 14.2774 W
SL Crossing - 13746.92' MD	206.65	5518.00	601216.42	622013.30	32° 39' 9.0632 N	104° 4' 16.3409 W
BHL (Agate 9H)	197.39	10548.51	601207.16	627043.81	32° 39' 8.8449 N	104° 3' 17.5003 W
HL Crossing - 18698.23' MD	197.59	10466.85	601207.36	626962.15	32° 39' 8.8490 N	104° 3' 18.4554 W

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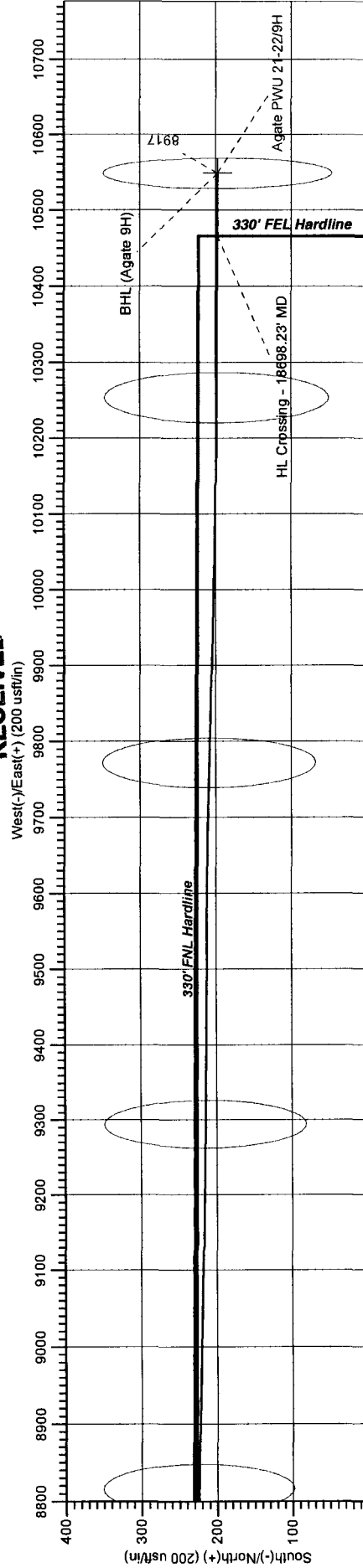
ACTUAL LINE CALLS

SHL: 585' FNL, 235' FEL of Sec 20
 BHL: 358' FNL, 245' FEL of Sec 22

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