

HOBBS OCD

APR 03 2012

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 October 15, 2009
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-40134	² Pool Code 49622	³ Pool Name PARKWAY; BONE SPRING
⁴ Property Code 38432	⁵ Property Name AGATE PWU 21	⁶ Well Number 4H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3321.2

¹⁰ Surface Location

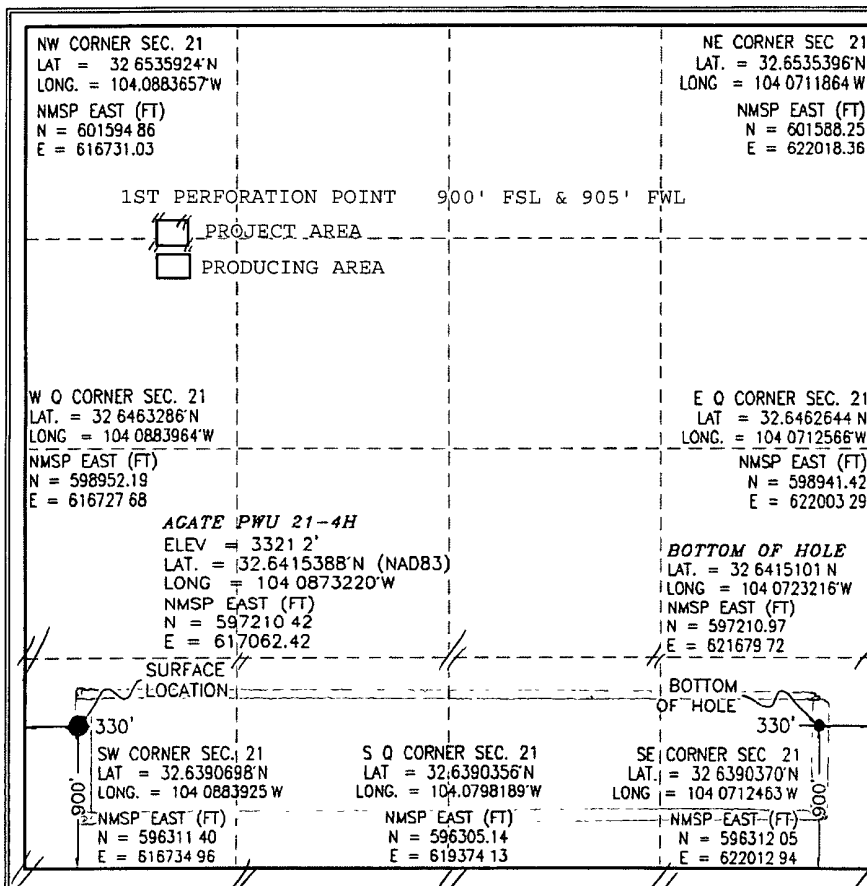
U.I. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	19 S	29 E		900	SOUTH	330	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

U.I. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	21	19 S	29 E		900	SOUTH	330	EAST	EDDY

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

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

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

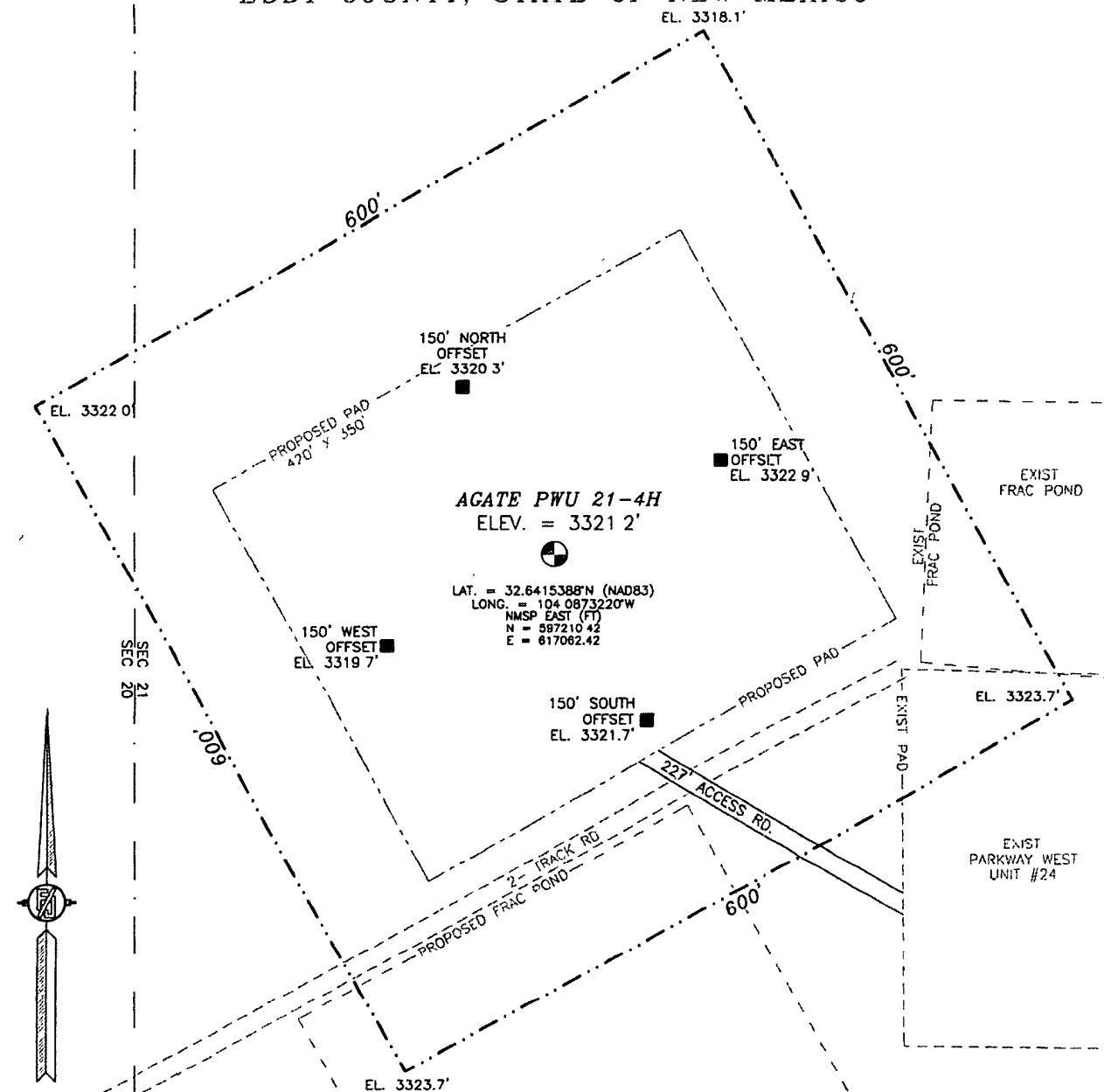
Signature: *[Signature]* Date: 02/28/2012
Printed Name: STEPHANIE A YSASAGA

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

FEBRUARY 28, 2012
Date of Survey
Signature: *[Signature]*
Seal of the Regional Surveyor
Certificate Number: FILIMON E. JARAMILLO, PLS 12797
SURVEY NO 792

SECTION 21, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO



012 60 120 240

SCALE 1" = 120'

DIRECTIONS TO LOCATION

FROM THE INTERSECTION CR 206 (ILLINOIS CAMP) AND CURRY COMB (CR 235) GO SOUTHEAST ON CR 235 3.1 MILES TO "Y" AT CR 248 (MILLMAN RD) AND CR 235 TAKE LEFT ON CR 235 GO 6.0 MILES THEN TAKE "Y" RIGHT (SOUTH) ON CALICHE RD GO 1.0 MILES THEN TAKE RIGHT (WEST) ON CALICHE RD GO 0.5 MILES THEN TAKE RIGHT (NORTHWEST) 0.25 MILES TO SITE

DEVON ENERGY PRODUCTION COMPANY, L.P.
AGATE PWU 21-4H

LOCATED 900 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE WEST LINE OF
SECTION 21, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 22, 2012

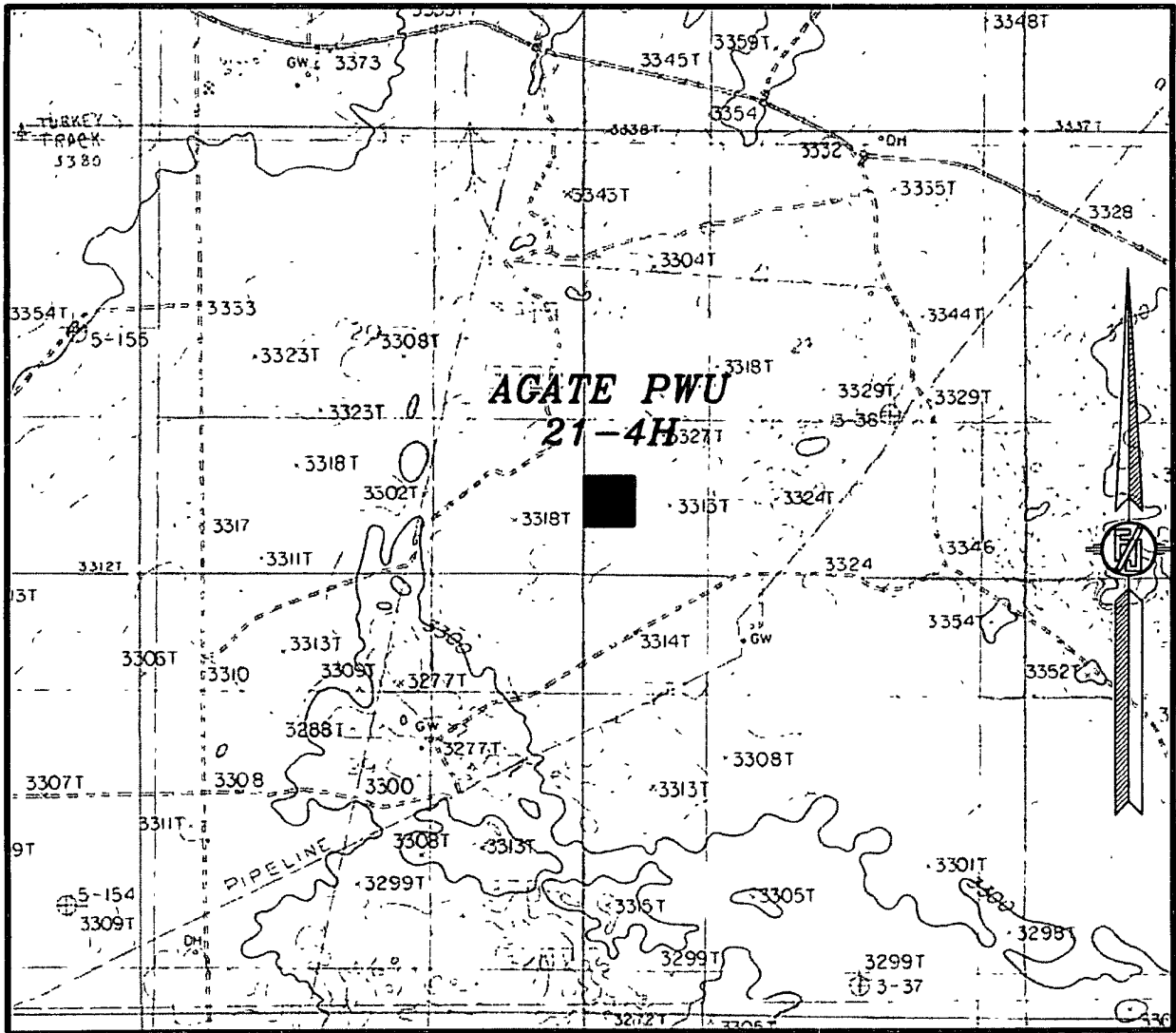
SURVEY NO. 792

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

CARLSBAD, NEW MEXICO

21, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
ILLINOIS CAMP NE

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.
AGATE PWU 21-4H

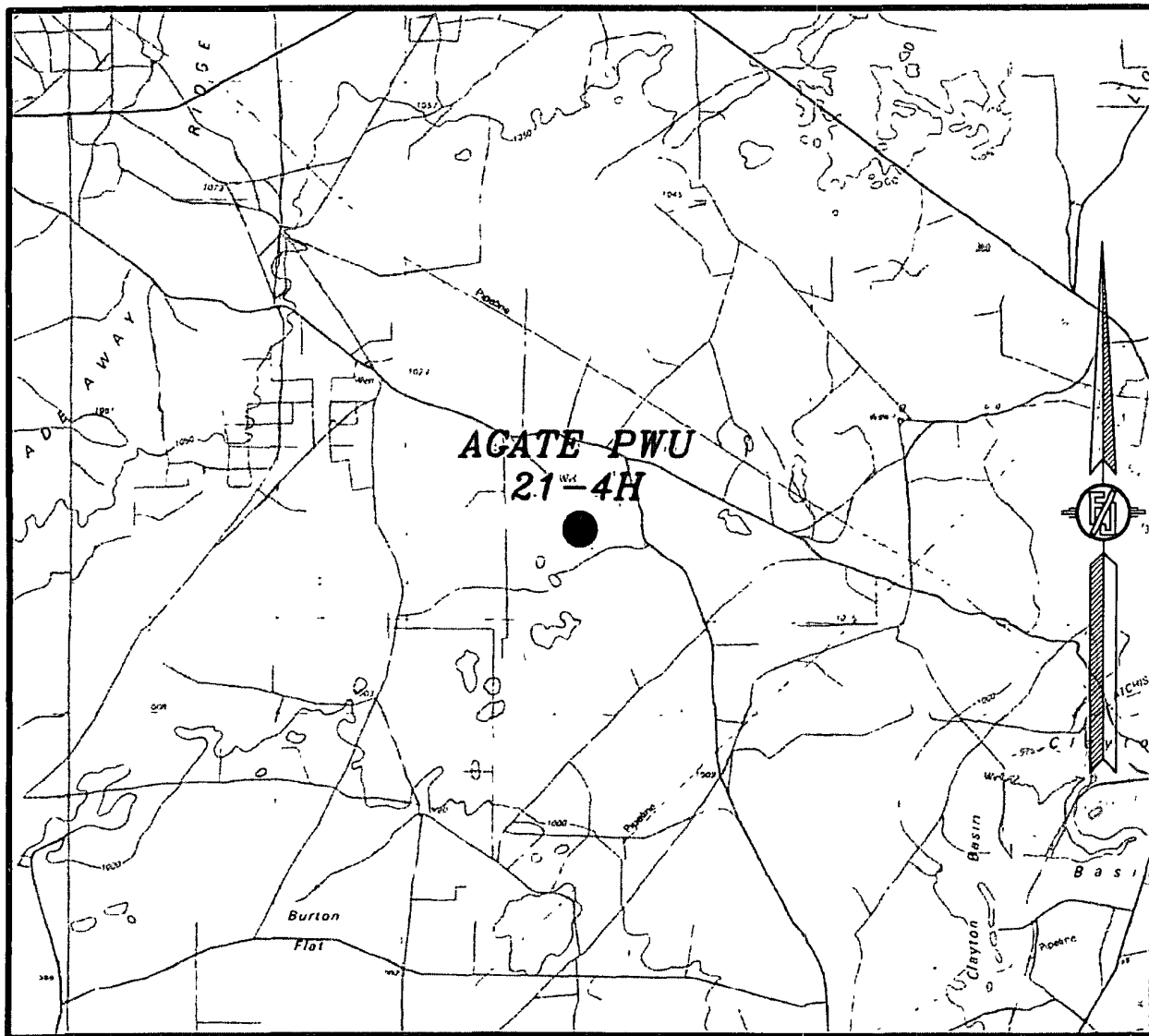
LOCATED 900 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE WEST LINE OF
SECTION 21, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 22, 2012

SURVEY NO. 792

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

SECTION 21, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.
AGATE PWU 21-4H

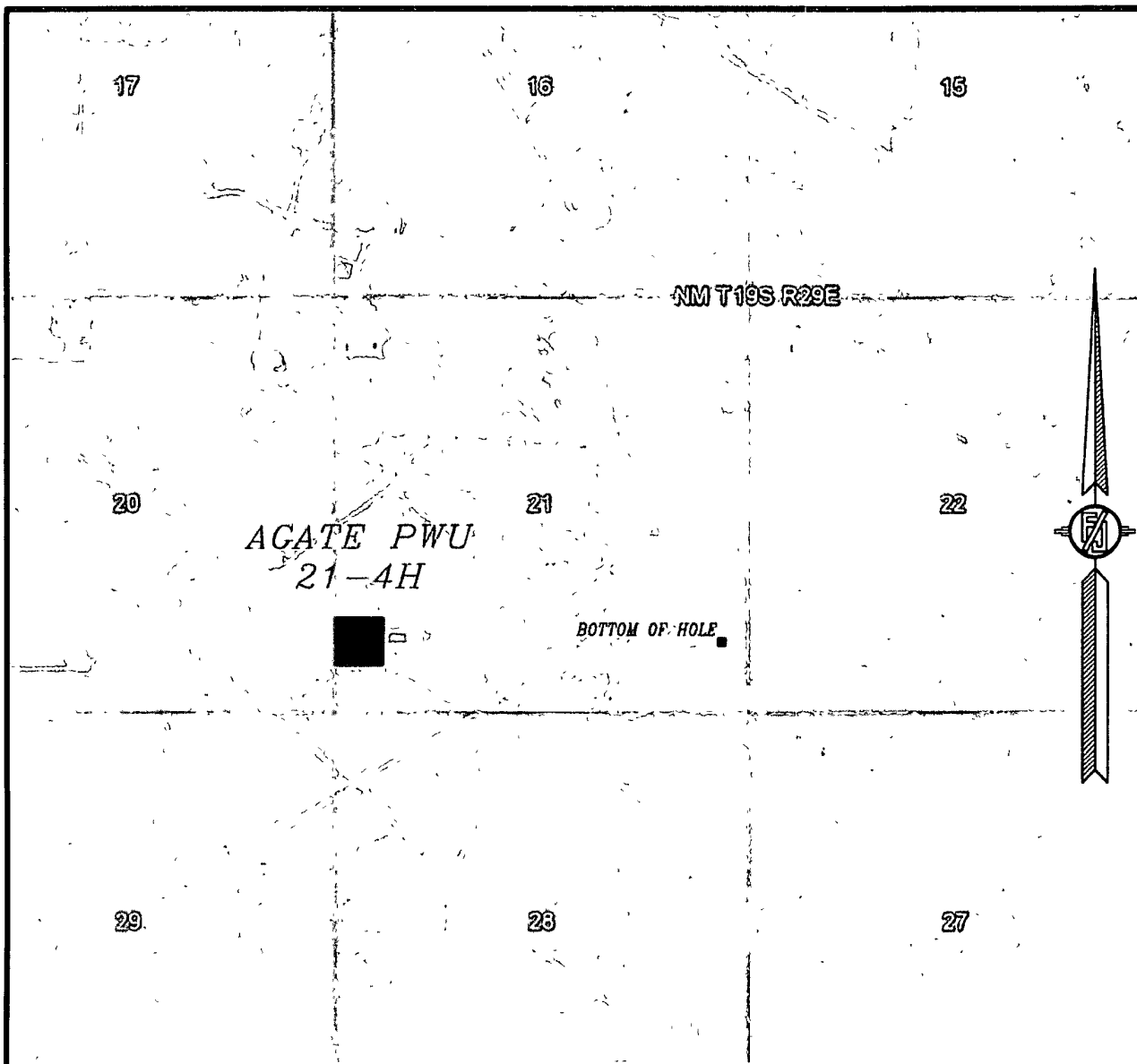
LOCATED 900 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE WEST LINE OF
SECTION 21, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 22, 2012

SURVEY NO. 792

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

SECTION 21, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
MAY 2011

DEVON ENERGY PRODUCTION COMPANY, L.P.
AGATE PWU 21-4H

LOCATED 900 FT. FROM THE SOUTH LINE
AND 330 FT. FROM THE WEST LINE OF
SECTION 21, TOWNSHIP 19 SOUTH,
RANGE 29 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

FEBRUARY 22, 2012

SURVEY NO. 792

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

Devon Energy Corporation

Eddy County, NM (NAD 83)

Agate PWU 21

Agate PWU 21 4H

Wellbore #1

Plan: Plan #1

Sperry Drilling Services Proposal Report

08 March, 2012

Well Coordinates 597,210 42 N, 617,062 42 E (32° 38' 29 54" N, 104° 05' 14 36" W)

Ground Level 3,321 00 ft

Local Coordinate Origin

Centered on Well Agate PWU 21 4H

Viewing Datum

GL 3321' + KB 25' @ 3346 00ft (Cactus 126)

TVDs to System

N

North Reference

Grid

Unit System

API - US Survey Feet

Version 2003 16 Build 43I

HALLIBURTON

Plan Report for Agate PWU 21 4H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
100 00	0 00	0 00	100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
200 00	0 00	0 00	200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
300 00	0 00	0 00	300 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
400 00	0 00	0 00	400 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
475 00	0 00	0 00	475 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
Salado										
500 00	0 00	0 00	500 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
600 00	0 00	0 00	600 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
700 00	0 00	0 00	700 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
800 00	0 00	0 00	800 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
900 00	0 00	0 00	900 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,000 00	0 00	0 00	1,000 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,100 00	0 00	0 00	1,100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,120 00	0 00	0 00	1,120 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
Tansil Dolomite										
1,200 00	0 00	0 00	1,200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,250 00	0 00	0 00	1,250 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
Yates										
1,300 00	0 00	0 00	1,300 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,400 00	0 00	0 00	1,400 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,500 00	0 00	0 00	1,500 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,600 00	0 00	0 00	1,600 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,615 00	0 00	0 00	1,615 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
Seven Rivers										
1,700 00	0 00	0 00	1,700 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,800 00	0 00	0 00	1,800 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
1,900 00	0 00	0 00	1,900 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,000 00	0 00	0 00	2,000 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,010 00	0 00	0 00	2,010 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
Queen										
2,100 00	0 00	0 00	2,100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,200 00	0 00	0 00	2,200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,300 00	0 00	0 00	2,300 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,400 00	0 00	0 00	2,400 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,500 00	0 00	0 00	2,500 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,600 00	0 00	0 00	2,600 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,700 00	0 00	0 00	2,700 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,800 00	0 00	0 00	2,800 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,900 00	0 00	0 00	2,900 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
2,905 00	0 00	0 00	2,905 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
San Andres										
3,000 00	0 00	0 00	3,000 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,100 00	0 00	0 00	3,100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,200 00	0 00	0 00	3,200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,300 00	0 00	0 00	3,300 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,400 00	0 00	0 00	3,400 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,410 00	0 00	0 00	3,410 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
Delaware										
3,500 00	0 00	0 00	3,500 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,600 00	0 00	0 00	3,600 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,700 00	0 00	0 00	3,700 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,800 00	0 00	0 00	3,800 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,900 00	0 00	0 00	3,900 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
4,000 00	0 00	0 00	4,000 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
4,100 00	0 00	0 00	4,100 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
4,200 00	0 00	0 00	4,200 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00

Plan Report for Agate PWU 21 4H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4,810.00	0.00	0.00	4,810.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cutoff Dolomite										
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,015.00	0.00	0.00	5,015.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spring Lm										
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,865.00	0.00	0.00	6,865.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1st Bone Spring Ss										
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6,975.00	0.00	0.00	6,975.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2nd Bone Spring Lime										
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7,306.67	0.00	0.00	7,306.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP/Start Build @ 7306.67' MD - Build Rate = 10.00°/100'										
7,350.00	4.33	89.99	7,349.96	0.00	1.64	1.64	10.00	10.00	0.00	89.99
7,400.00	9.33	89.99	7,399.59	0.00	7.58	7.58	10.00	10.00	0.00	0.00
7,450.00	14.33	89.99	7,448.51	0.00	17.83	17.83	10.00	10.00	0.00	0.00
7,500.00	19.33	89.99	7,496.35	0.00	32.31	32.31	10.00	10.00	0.00	0.00
7,550.00	24.33	89.99	7,542.75	0.01	50.90	50.90	10.00	10.00	0.00	0.00
7,600.00	29.33	89.99	7,587.35	0.01	73.46	73.46	10.00	10.00	0.00	0.00
7,650.00	34.33	89.99	7,629.82	0.01	99.82	99.82	10.00	10.00	0.00	0.00
7,700.00	39.33	89.99	7,669.83	0.02	129.79	129.79	10.00	10.00	0.00	0.00
7,750.00	44.33	89.99	7,707.07	0.02	163.12	163.12	10.00	10.00	0.00	0.00
7,800.00	49.33	89.99	7,741.27	0.02	199.58	199.58	10.00	10.00	0.00	0.00
7,832.42	52.57	89.99	7,761.69	0.03	224.76	224.76	10.00	10.00	0.00	0.00
2nd Bone Spring Ss										
7,850.00	54.33	89.99	7,772.15	0.03	238.88	238.88	10.00	10.00	0.00	0.00
7,900.00	59.33	89.99	7,799.50	0.03	280.72	280.72	10.00	10.00	0.00	0.00
7,950.00	64.33	89.99	7,823.09	0.04	324.78	324.78	10.00	10.00	0.00	0.00
8,000.00	69.33	89.99	7,842.76	0.04	370.74	370.74	10.00	10.00	0.00	0.00
8,050.00	74.33	89.99	7,858.34	0.05	418.23	418.23	10.00	10.00	0.00	0.00
8,100.00	79.33	89.99	7,869.73	0.06	466.90	466.90	10.00	10.00	0.00	0.00
8,150.00	84.33	89.99	7,876.83	0.06	516.38	516.38	10.00	10.00	0.00	0.00

Plan Report for Agate PWU 21 4H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toothface Azimuth (°)
8,182.43	87.58	89.99	7,879.12	0.07	548.73	548.73	10.00	10.00	0.00	0.00
Target Line										
8,202.37	89.57	89.99	7,879.61	0.07	568.66	568.66	10.00	10.00	0.00	0.00
End Build @ 8202.37' MD - Hold Angle = 89.57°										
8,300.00	89.57	89.99	7,880.35	0.08	666.28	666.28	0.00	0.00	0.00	0.00
8,400.00	89.57	89.99	7,881.10	0.09	766.28	766.28	0.00	0.00	0.00	0.00
8,500.00	89.57	89.99	7,881.85	0.10	866.28	866.28	0.00	0.00	0.00	0.00
8,600.00	89.57	89.99	7,882.60	0.12	966.27	966.27	0.00	0.00	0.00	0.00
8,700.00	89.57	89.99	7,883.35	0.13	1,066.27	1,066.27	0.00	0.00	0.00	0.00
8,800.00	89.57	89.99	7,884.10	0.14	1,166.27	1,166.27	0.00	0.00	0.00	0.00
8,900.00	89.57	89.99	7,884.85	0.15	1,266.27	1,266.27	0.00	0.00	0.00	0.00
9,000.00	89.57	89.99	7,885.60	0.16	1,366.26	1,366.26	0.00	0.00	0.00	0.00
9,100.00	89.57	89.99	7,886.35	0.17	1,466.26	1,466.26	0.00	0.00	0.00	0.00
9,200.00	89.57	89.99	7,887.10	0.19	1,566.26	1,566.26	0.00	0.00	0.00	0.00
9,300.00	89.57	89.99	7,887.85	0.20	1,666.25	1,666.25	0.00	0.00	0.00	0.00
9,400.00	89.57	89.99	7,888.60	0.21	1,766.25	1,766.25	0.00	0.00	0.00	0.00
9,500.00	89.57	89.99	7,889.35	0.22	1,866.25	1,866.25	0.00	0.00	0.00	0.00
9,600.00	89.57	89.99	7,890.10	0.23	1,966.25	1,966.25	0.00	0.00	0.00	0.00
9,700.00	89.57	89.99	7,890.85	0.25	2,066.24	2,066.24	0.00	0.00	0.00	0.00
9,800.00	89.57	89.99	7,891.60	0.26	2,166.24	2,166.24	0.00	0.00	0.00	0.00
9,900.00	89.57	89.99	7,892.36	0.27	2,266.24	2,266.24	0.00	0.00	0.00	0.00
10,000.00	89.57	89.99	7,893.11	0.28	2,366.23	2,366.23	0.00	0.00	0.00	0.00
10,100.00	89.57	89.99	7,893.86	0.29	2,466.23	2,466.23	0.00	0.00	0.00	0.00
10,200.00	89.57	89.99	7,894.61	0.31	2,566.23	2,566.23	0.00	0.00	0.00	0.00
10,300.00	89.57	89.99	7,895.36	0.32	2,666.23	2,666.23	0.00	0.00	0.00	0.00
10,400.00	89.57	89.99	7,896.11	0.33	2,766.22	2,766.22	0.00	0.00	0.00	0.00
10,500.00	89.57	89.99	7,896.86	0.34	2,866.22	2,866.22	0.00	0.00	0.00	0.00
10,600.00	89.57	89.99	7,897.61	0.35	2,966.22	2,966.22	0.00	0.00	0.00	0.00
10,700.00	89.57	89.99	7,898.36	0.37	3,066.21	3,066.21	0.00	0.00	0.00	0.00
10,800.00	89.57	89.99	7,899.11	0.38	3,166.21	3,166.21	0.00	0.00	0.00	0.00
10,900.00	89.57	89.99	7,899.86	0.39	3,266.21	3,266.21	0.00	0.00	0.00	0.00
11,000.00	89.57	89.99	7,900.61	0.40	3,366.21	3,366.21	0.00	0.00	0.00	0.00
11,100.00	89.57	89.99	7,901.36	0.41	3,466.20	3,466.20	0.00	0.00	0.00	0.00
11,200.00	89.57	89.99	7,902.11	0.42	3,566.20	3,566.20	0.00	0.00	0.00	0.00
11,300.00	89.57	89.99	7,902.86	0.44	3,666.20	3,666.20	0.00	0.00	0.00	0.00
11,400.00	89.57	89.99	7,903.61	0.45	3,766.19	3,766.19	0.00	0.00	0.00	0.00
11,500.00	89.57	89.99	7,904.36	0.46	3,866.19	3,866.19	0.00	0.00	0.00	0.00
11,600.00	89.57	89.99	7,905.11	0.47	3,966.19	3,966.19	0.00	0.00	0.00	0.00
11,700.00	89.57	89.99	7,905.86	0.48	4,066.19	4,066.19	0.00	0.00	0.00	0.00
11,800.00	89.57	89.99	7,906.61	0.50	4,166.18	4,166.18	0.00	0.00	0.00	0.00
11,900.00	89.57	89.99	7,907.36	0.51	4,266.18	4,266.18	0.00	0.00	0.00	0.00
12,000.00	89.57	89.99	7,908.12	0.52	4,366.18	4,366.18	0.00	0.00	0.00	0.00
12,100.00	89.57	89.99	7,908.87	0.53	4,466.17	4,466.17	0.00	0.00	0.00	0.00
12,200.00	89.57	89.99	7,909.62	0.54	4,566.17	4,566.17	0.00	0.00	0.00	0.00
12,251.13	89.57	89.99	7,910.00	0.55	4,617.30	4,617.30	0.00	0.00	0.00	0.00
TD @ 12251.13' MD - Agate PWU 21 4H / BHL										

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,306.67	7,306.67	0.00	0.00	KOP/Start Build @ 7306.67' MD
7,306.67	7,306.67	0.00	0.00	Build Rate = 10.00°/100'
8,202.37	7,879.61	0.07	568.65	End Build @ 8202.37' MD
8,202.37	7,879.61	0.07	568.66	Hold Angle = 89.57°
12,251.13	7,910.00	0.55	4,617.30	TD @ 12251.13' MD

Plan Report for Agate PWU 21 4H - Plan #1

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	Origin +E/-W (ft)	Start TVD (ft)
TD	No Target (Freehand)	89 99	Slot	0 00	0 00	0 00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0 00	12,251 13	Plan #1	MWD

Formation Details

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
475 00	475 00	Salado		0 43	89 99
1,120 00	1,120 00	Tansil Dolomite		0 43	89 99
1,250 00	1,250 00	Yates		0 43	89 99
1,615 00	1,615 00	Seven Rivers		0 43	89 99
2,010 00	2,010 00	Queen		0 43	89 99
2,905 00	2,905 00	San Andres		0 43	89 99
3,410 00	3,410 00	Delaware		0 43	89 99
4,810 00	4,810 00	Cutoff Dolomite		0 43	89 99
5,015 00	5,015 00	Bone Spring Lm		0 43	89 99
6,865 00	6,865 00	1st Bone Spring Ss		0 43	89 99
6,975 00	6,975 00	2nd Bone Spring Lime		0 43	89 99
7,832 42	7,760 00	2nd Bone Spring Ss		0 43	89 99
8,182 43	7,875 00	Target Line		0 43	89 99

Targets associated with this wellbore

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
Agate PWU 21 4H / BHL	7,910 00	0 55	4,617 30	Point

North Reference Sheet for Agate PWU 21 - Agate PWU 21 4H - Wellbore #1

All data is in US Feet unless otherwise stated Directions and Coordinates are relative to Grd North Reference

Vertical Depths are relative to GL 3321' + KB 25' @ 3346 00ft (Cactus 126) Northing and Easting are relative to Agate PWU 21 4H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is -104 33°, Longitude Origin 0° 0' 0 000 E°, Latitude Origin 0° 0' 0 000 N°

False Easting 541,337 50ft, False Northing 0 00ft, Scale Reduction 0 99991566

Grid Coordinates of Well 597,210 42 ft N, 617,062 42 ft E

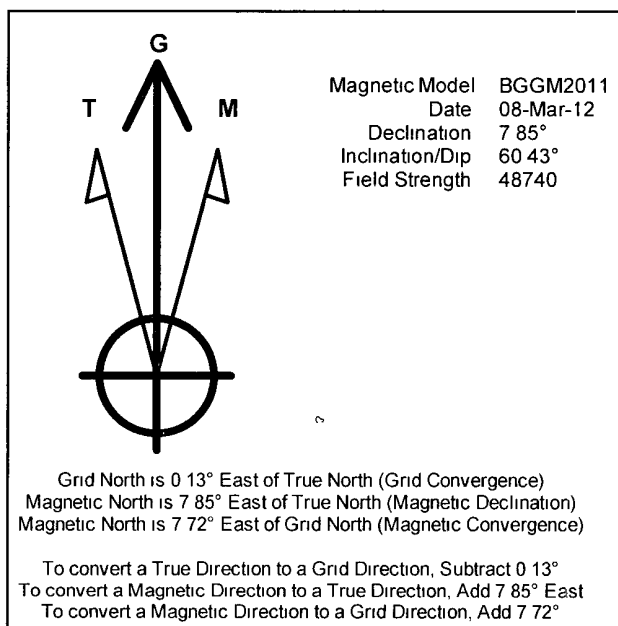
Geographical Coordinates of Well 32° 38' 29 54" N, 104° 05' 14 36" W

Grid Convergence at Surface is 0 13°

Based upon Minimum Curvature type calculations, at a Measured Depth of 12,251 13ft

the Bottom Hole Displacement is 4,617 30ft in the Direction of 89 99° (Grid)

Magnetic Convergence at surface is -7 72° (8 March 2012, , BGGM2011)





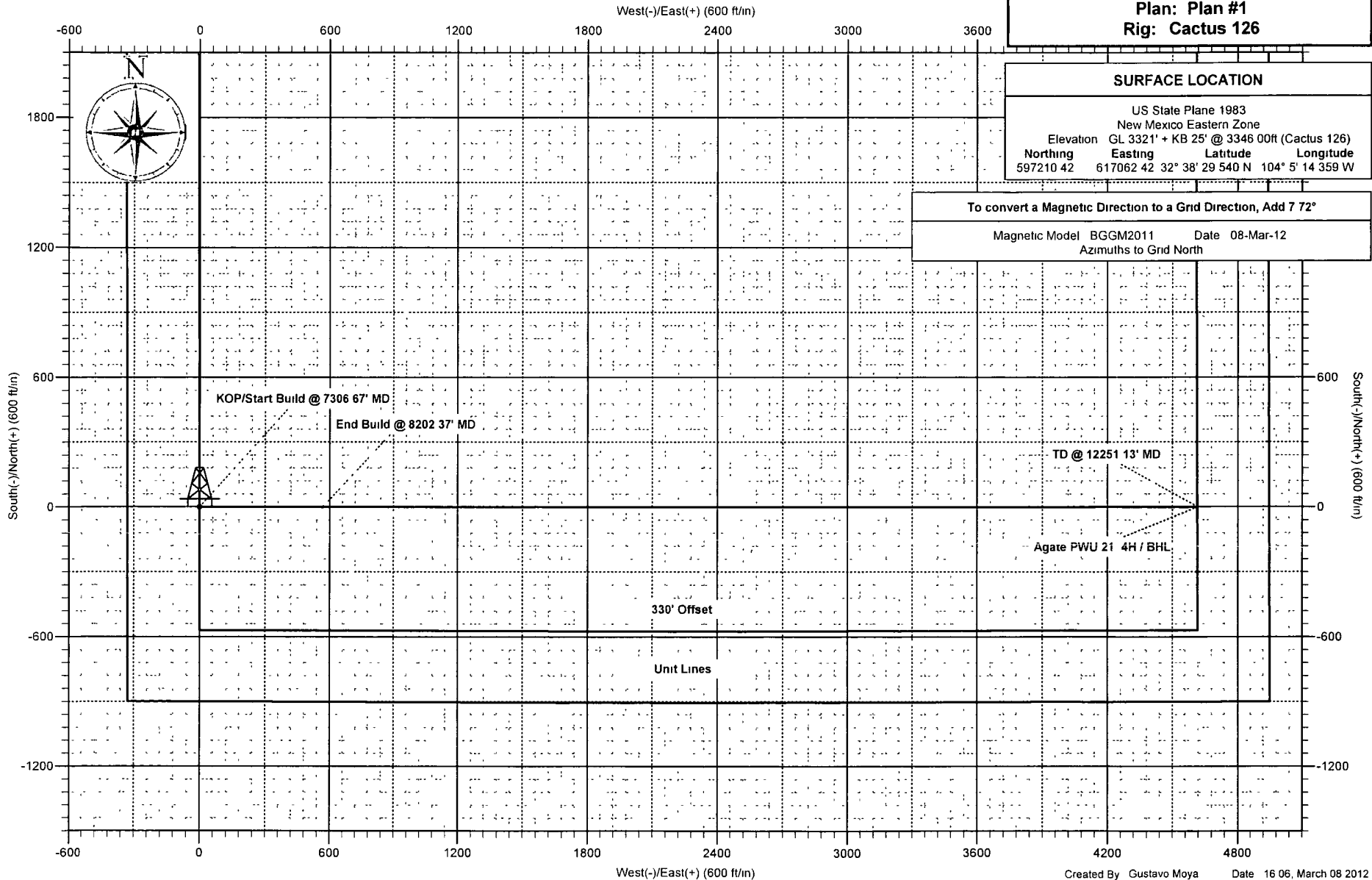
Project: Eddy County, NM (NAD 83)
 Site: Agate PWU 21
 Well: Agate PWU 21 4H
 Wellbore: Wellbore #1
 Plan: Plan #1
 Rig: Cactus 126

SURFACE LOCATION

US State Plane 1983
 New Mexico Eastern Zone
 Elevation GL 3321' + KB 25' @ 3346 00ft (Cactus 126)
 Northing 597210 42 Easting 617062 42 Latitude 32° 38' 29 540 N Longitude 104° 5' 14 359 W

To convert a Magnetic Direction to a Grid Direction, Add 7 72°

Magnetic Model BGGM2011 Date 08-Mar-12
 Azimuths to Grid North



Devon Energy Corporation

HALLIBURTON | Sperry Drilling

Project: Eddy County, NM (NAD 83)
 Site: Agate PWU 21
 Well: Agate PWU 21 4H
 Wellbore: Wellbore #1
 Plan: Plan #1
 Rig: Cactus 126

SURFACE LOCATION

US State Plane 1983
 New Mexico Eastern Zone
 Elevation GL 3321' + KB 25' @ 3346 00ft (Cactus 126)
 Northing 597210 42 Easting 617062 42 Latitude 32° 38' 29 540 N Longitude 104° 5' 14 359 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	
7306 67	0 00	0 00	7306 67	0 00	0 00	0 00	0 00	0 00	KOP/Start Build
8202 37	89 57	89 99	7879 61	0 07	568 66	10 00	89 99	568 66	End Build
12251 13	89 57	89 99	7910 00	0 55	4617 30	0 00	0 00	4617 30	TD

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Agate PWU 21 4H / BHL	7910 00	0 55	4617 30	597210 97	621679 72	Point



To convert a Magnetic Direction to a Grd Direction, Add 7.72°

Magnetic Model BGGM2011 Date 08-Mar-12
 Azimuths to Grd North

