

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						<b>1. WELL NAME and NUMBER</b> Aneth Unit E317X							
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						<b>3. FIELD OR WILDCAT</b> GREATER ANETH							
<b>4. TYPE OF WELL</b> Water Injection Well      Coalbed Methane Well: NO						<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b> ANETH							
<b>6. NAME OF OPERATOR</b> RESOLUTE NATURAL RESOURCES						<b>7. OPERATOR PHONE</b> 303 534-4600							
<b>8. ADDRESS OF OPERATOR</b> 1675 Boradway Ste 1950, Denver, CO, 80202						<b>9. OPERATOR E-MAIL</b> pflynn@resoluteenergy.com							
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> I-149-IND-8635			<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>							
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>							
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>						<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>							
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b> Navajo Nation			<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			<b>19. SLANT</b> VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>							
<b>20. LOCATION OF WELL</b>		<b>FOOTAGES</b>		<b>QTR-QTR</b>		<b>SECTION</b>		<b>TOWNSHIP</b>		<b>RANGE</b>		<b>MERIDIAN</b>	
LOCATION AT SURFACE		1984 FSL 609 FWL		NWSW		17		40.0 S		24.0 E		S	
Top of Uppermost Producing Zone		1984 FSL 609 FWL		NWSW		17		40.0 S		24.0 E		S	
At Total Depth		1984 FSL 609 FWL		NWSW		17		40.0 S		24.0 E		S	
<b>21. COUNTY</b> SAN JUAN			<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 1984			<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 1386							
			<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 51			<b>26. PROPOSED DEPTH</b> MD: 5575 TVD: 5575							
<b>27. ELEVATION - GROUND LEVEL</b> 4719			<b>28. BOND NUMBER</b> B001252			<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> 09-1428; A60998 or 06.0015-06.0020							
<b>Hole, Casing, and Cement Information</b>													
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement			Sacks	Yield	Weight	
Cond	24	16	4719 - 4629	65.0	C-75 Casing/Tubing	8.3	Possolan-Lime			200	1.18	15.8	
Surf	14.75	10.75	0 - 3305	40.5	J-55 ST&C	9.0	Halliburton Light , Type Unknown			392	1.88	12.5	
							Halliburton Premium , Type Unknown			112	1.16	15.8	
Prod	9.875	7	0 - -547	26.0	J-55 LT&C	10.0	50/50 Poz			541	1.9	12.4	
							Type V			71	1.31	13.5	
							50/50 Poz			729	1.88	12.5	
							Type V			147	1.15	15.8	
<b>ATTACHMENTS</b>													
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>													
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER						<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN							
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)						<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER							
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)						<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP							
<b>NAME</b> Brian Wood				<b>TITLE</b> Consultant				<b>PHONE</b> 505 466-8120					
<b>SIGNATURE</b>				<b>DATE</b> 03/05/2013				<b>EMAIL</b> brian@permitswest.com					
<b>API NUMBER ASSIGNED</b> 43037500540000				<b>APPROVAL</b>   Permit Manager									

Fom 3160-3  
(August 2007)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

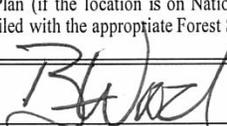
FORM APPROVED  
OMB No. 1004-0137  
Expires July 31, 2010

5. Lease Serial No. I-149-IND-8635	
6. If Indian, Allottee or Tribe Name NAVAJO NATION	
7. If Unit or CA Agreement, Name and No. ANETH	
8. Lease Name and Well No. ANETH UNIT E317X	
9. API Well No. 43-037-	
10. Field and Pool, or Exploratory GREATER ANETH	
11. Sec., T. R. M. or Blk. and Survey or Area NWSW 17-40S-24E SLM	
12. County or Parish SAN JUAN	13. State UT
14. Distance in miles and direction from nearest town or post office* 3 MILES NORTH OF MONTEZUMA CREEK, UT	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,984'	16. No. of acres in lease 1,386.14
17. Spacing Unit dedicated to this well NWSW SEC. 317	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 51' (E317)	19. Proposed Depth 5,575'
20. BLM/BIA Bond No. on file B001252	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4,719' UNGRADED	22. Approximate date work will start* 10/01/2012
	23. Estimated duration 1 MONTH

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

- |  |   |
|--|---|
| 1. Well plat certified by a registered surveyor.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification   |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM.             |

25. Signature 	Name (Printed/Typed) BRIAN WOOD (505 466-8120)	Date 06/21/2012
--	---	--------------------

Title  
CONSULTANT (FAX 505 466-9682)

Approved by (Signature)	Name (Printed/Typed)	Date
-------------------------	----------------------	------

Title	Office
-------	--------

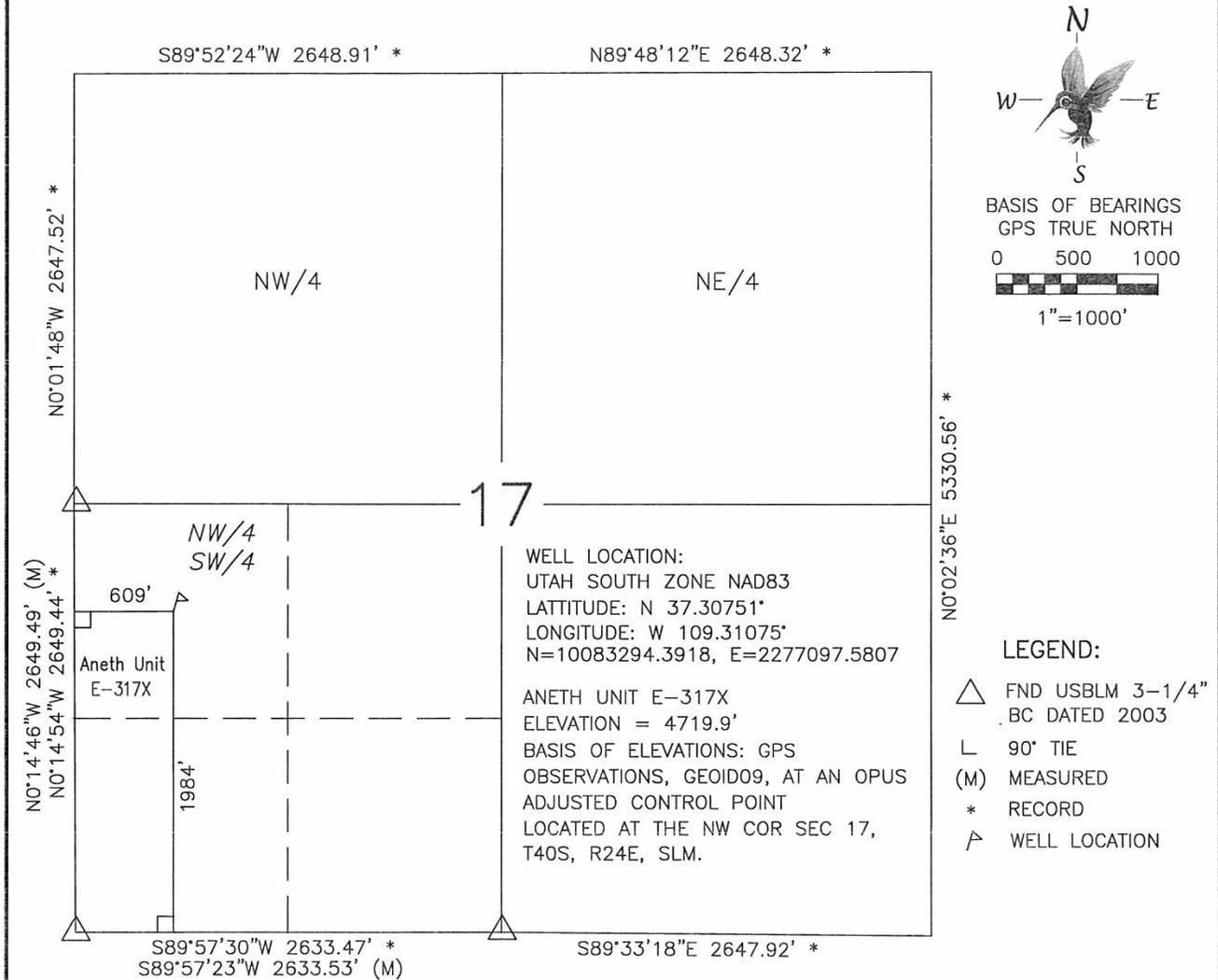
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

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.

(Continued on page 2)

\*(Instructions on page 2)

# Aneth Unit E-317X Well Location



I, Gerald G. Huddleston, do hereby certify that I am a registered Utah land surveyor holding certificate number 161297 as prescribed under the laws of the State of Utah, and I further certify that under authority of the owner I have surveyed the well location as shown hereon and that the same is correct and true to the best of my knowledge and belief.

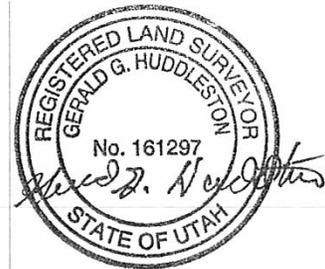


EXHIBIT A

FOOTAGE: 1984' FSL 609' FWL	<b>RESOLUTE</b> NATURAL RESOURCES		
SEC 17, T40S, R24E, SLM, SAN JUAN COUNTY, UT			
	SURVEYED: 01/31/12		
	DRAWN BY: GEL	DATE: 02/01/12	
ELEVATION: 4719.9' at existing ground level (NAVD88)	NOTE:		
HUMMINGBIRD SURVEYING, LLC --- P.O. Box 416 Montezuma Creek, UT 84534 --- 970-570-5108			

Resolute Aneth, LLC  
 Aneth Unit E317X  
 1984' FSL & 609' FWL  
 Sec. 17, T. 40 S., R. 24 E.  
 San Juan County, Utah

PAGE 1

### Drilling Program

This well is on the same pad as the Aneth Unit E317. That injection well was drilled in 1957 and temporarily abandoned in 2007 due to down hole mechanical problems. The narrow (4.5") production casing in that well prevents repairs. The E317X is 51' west of the E317. The E317X will be plugged after the E317X is drilled and completed.

#### 1. FORMATION TOPS

The estimated tops of important geologic markers are:

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Morrison Formation	0'	10'	+4,719'
Navajo Sandstone	524'	534'	+4,195'
Chinle Shale	1,364'	1,374'	+3,355'
Organ Rock	2,579'	2,589'	+2,140'
Hermosa	4,404'	4,414'	+315'
Ismay Limestone/Dolomite	5,249'	5,259'	-530'
Gothic Shale	5,399'	5,409'	-680'
Desert Creek Limestone/Dolomite	5,414'	5,424'	-695'
Chimney Rock Shale	5,574'	5,584'	-855'
Total Depth (TVD)	5,575'	5,585'	-856'

#### 2. NOTABLE ZONES

The principal underground sources of drinking water (USDW) in the Greater Aneth area include the Entrada Sandstone, Navajo Sandstone, and Wingate Sandstone, which collectively comprise the Navajo aquifer. The projected top of the Navajo Aquifer is at 524'.

The Chinle formation separates the fresh water aquifers above from non-



Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah

PAGE 2

usable saline water below. The top of the Chinle formation is projected at a depth of 1,364'.

The well bore will be cased and cemented to prevent migration of fluids out of the target formation and into formations containing fresh water. Surface casing will be set >50 feet into the Chinle and cemented to surface to protect the USDW above.

Potential oil, gas, and mineral resources to be encountered include the Ismay and Desert Creek zones of the Paradox formation, which are the primary hydrocarbon reservoirs in the southern Paradox Basin. Goal for this well is to inject water and carbon dioxide into the Desert Creek.

Production casing in the proposed well will be cemented from TD to the surface in two stages.

### 3. PRESSURE CONTROL

The Ismay and Desert Creek are normally pressured (1,900 - 2,400 psi at 5,500' to 5,700'). BOP system diagrams and procedures follow. All BOPE tests will be recorded and a copy of the pressure charts maintained with the tour sheet or drilling log.

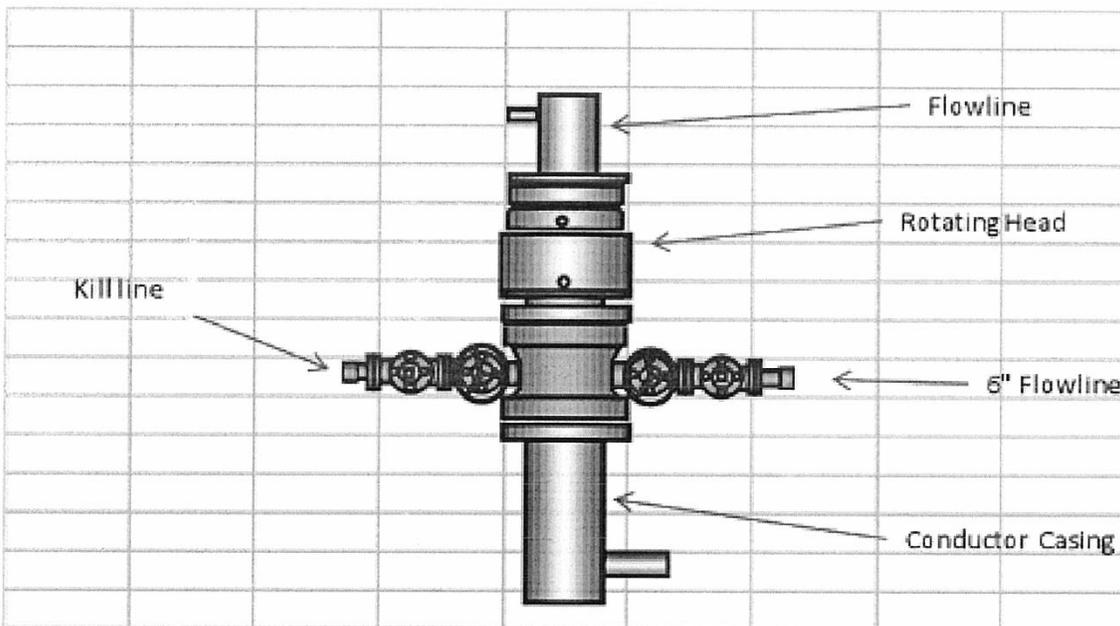
Blowout preventer equipment will be installed and tested prior to drilling of the surface casing shoe and for each subsequent phase of drilling operations. Accumulators will be tested for pre-charge pressure and for holding pressure on the manifold before connecting to the stack. Annular BOPs will be tested on nipple up and every 7 days thereafter, first to 200 psi to simulate field well control situations, and then to the rated working pressure. Each test will be held for 15 minutes. The choke manifold will be operated and circulated through for kill rate pressures with each change of bottom hole assembly, but at least daily, using 2 slow pump rates, one at idle, and one 10 strokes above that.



Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah

PAGE 3

A conductor pipe diverter system as illustrated below will be installed to control well flows encountered from  $\approx 90'$  to  $\approx 1,414'$ . The diverter system includes a conductor pipe, 2,000 psi annular preventer, and a 6 inch minimum diameter diverter line. The diverter line will be kept open so that flow can be immediately diverted by shutting the preventer. All diverter lines will be securely staked and will be straight lines or will use tee blocks or are targeted with running tees. All diverter line valves and other components will be 150 psi minimum working pressure.

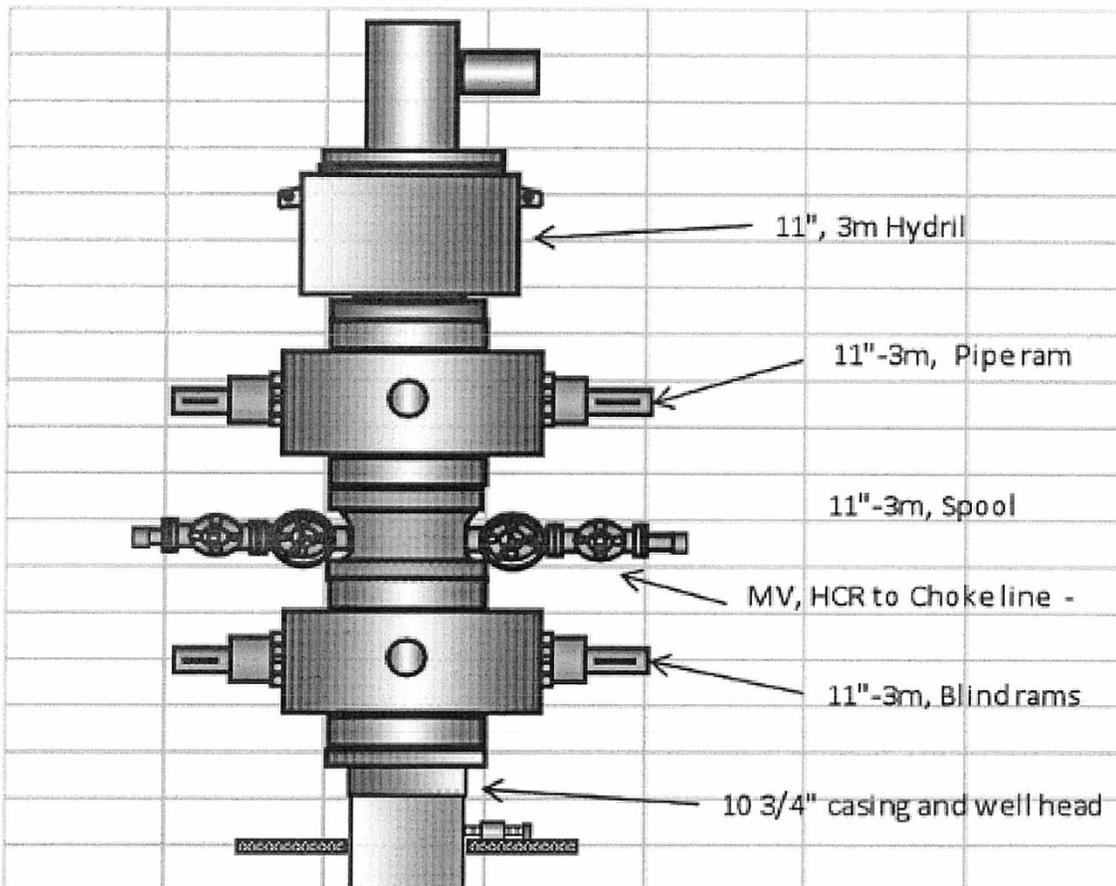


Resolute Aneth, LLC  
 Aneth Unit E317X  
 1984' FSL & 609' FWL  
 Sec. 17, T. 40 S., R. 24 E.  
 San Juan County, Utah

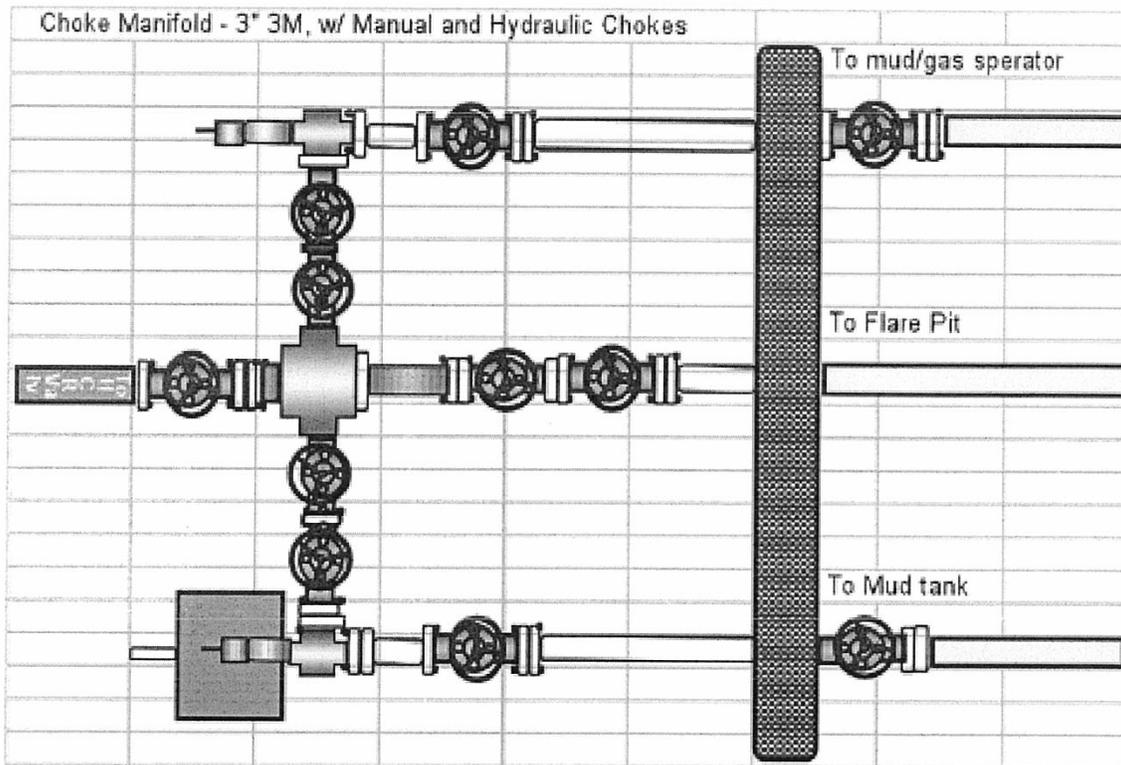
PAGE 4

A RSRA system with HCR valve and rotating head as illustrated below will be installed to control well flows encountered during drilling from  $\approx 1,414'$  to TD. Full opening flanged valves will be used on all outlets, flow lines, and the choke manifold. Kill and choke lines will be laid as straight lines or will use tee blocks or running tees. Kill and choke lines will have minimum diameters of 2 and 3 inches respectively.

### 3,000 psi Surface/Production Casing BOPE System



Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah



Resolute Aneth, LLC  
 Aneth Unit E317X  
 1984' FSL & 609' FWL  
 Sec. 17, T. 40 S., R. 24 E.  
 San Juan County, Utah

4. CASING & CEMENT

**Conductor Casing / Cementing**

<i>Condcutor</i>	Hole Size	Depth	Mud Wt	Hyd Press	Cement Wt	Cmnt Hyd Press	Delta Press	
	24	90	8.30	38.84	26.00	121.68	82.84	
	Casing Siz	Grade	Cplg	Wt/ft	Collapse	Internal Yield	Joint Strength	Pipe Yield
	16.00	C-75	PE	65.00	740	1730	322,000	541,000
SF= Collapse 1.125, Internal Press 1.00, joint Stength 1.80, Pipe Yield 1.25								
<i>Cement</i>	Type	Wt	Yield	Vol-Cu Yds	Additives			
	Lead	Redi-mix	26	Grout	5.82			
	Tail							
<i>Stg Tool</i>								
	Lead					Additives		
	Tail							
<i>Shoe Cntrlzrs</i>	Notched collar							
	None							
<i>Other</i>								



Resolute Aneth, LLC  
 Aneth Unit E317X  
 1984' FSL & 609' FWL  
 Sec. 17, T. 40 S., R. 24 E.  
 San Juan County, Utah

**Surface Casing and Cement**

Hole Size	Depth	Mud Wt	Mud Hyd Press	Cement Wt	Cmt Hyd Press	Delta Press	
14.750	1414.00	9.00	661.75	12.4/15.8	945.79	284.04	
Casing Size	Grade	Colg	Wt/ft	Collapse	Internal Yield	Joint Strength	Pipe Yield
10.750	J-55	STC Rd	40.50	1580	3130	420,000	629,000
SF= Collapse 1.125, Internal Press 1.00, joint Strength 1.80, Pipe Yield 1.25							
	Type	Wt	Yield	Vol-bbl	Vol-Sks	Additives	
Lead	Prm Light	12.50	1.88	131.12	391.60	5 lbm/sk Kol-Seal, 2% CaCl <sub>2</sub> , .125 lbm/sk Poly-E-Flake	
Tail	Premium	15.80	1.16	23.12	111.89	.125 lbm/sk Poly-E-Flake	
None							
Lead							
Tail							
HES Trophy, Auto fill							
API 10 3/4, (12): 3 on bottom jt, 1 every 4th joint to surface							



Resolute Aneth, LLC  
 Aneth Unit E317X  
 1984' FSL & 609' FWL  
 Sec. 17, T. 40 S., R. 24 E.  
 San Juan County, Utah

**Production Casing and Cement**

Prod	Hole Size	Depth	Mud Wt	Hyd Press	Cement Wt	Cmt Hyd Press	Delta Press	
	9.875	5266	10.00	2738.32	12.4/15.8	3652.97	914.65	
	Casing Siz	Grade	Cplg	Wt/ft	Collapse	Internal Yield	Joint Strength	Pipe Yield
	7.000	J-55	LTC Rd	26.00	6300	7400	635,000	729,000
SF= Collapse 1.125, Internal Press 1.00, joint Stength 1.80, Pipe Yield 1.25								

	Type	Wt	Yield	Vol-bbl	Vol -Sks	Additives
<b>Cement</b>	Lead	50/50 poz	12.40	1.90	183.11	541.13 5 lbm/sk Gilsonite, .125 lbm/sk Poly-E-flake, .4% Halad® 9
	Tail	Type V	13.50	1.31	16.62	71.24 .125 lbm/sk Poly-E-Flake, .3% Halad R 9
<b>Stg Tool</b>	HES Type P ES Stage Cementing Tool Set @ 2,500' (+,-)					
	Lead	50/50 Poz	12.50	1.88	244.15	729.19 5 lbm/sk Gilsonite, .125 lbm/sk Poly-E-flake
	Tail	Type V	15.80	1.15	30.18	147.33 .125 lbm/sk Poly-E-Flake, .3% Halad R9
<b>Shoe</b>	HES float shoe & HES float collar,					
<b>Cntrlzrs</b>	API 7 5/8", (45): 2 on bottom jt, 1 every 4th joint to stage tool, one either side of stage tool, then 1 every 4th jt to surface					
<b>Other</b>						

5. MUD PROGRAM

Sufficient quantities of drilling fluids as specified below will be kept on site to maintain well control during drilling. Tests to determine density, viscosity, gel strength, filtration, and pH will be performed daily. Kill weight brine (10 ppg) will be on hand in volume to kill the well if necessary.

0' - 90'

Type: fresh water spud mud with 8.34 - 8.8 pounds per gallon and 4 - 6% funnel viscosity



Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah

PAGE 9

90' - 1,414'

Type: fresh water spud mud  
Weight: 8.3 - 9.7 pounds per gallon  
Funnel Viscosity: 35 - 40 seconds per quart  
Yield Point: 6 - 12 pounds per hundred square feet  
Gels: 8 - 15 10 second/10 minutes  
Total Hardness: 0 - <200 mg/l  
API Fluid Loss: 12 - 15 ml/30 minutes  
Total Solids: 0 - <10%

1,414' - 5,266'

Type: fresh water with gel + PHPA + LSND  
Weight: 9.7 - 10.2 pounds per gallon  
Funnel Viscosity: 35 - 40 seconds per quart  
Yield Point: 6 - 12 pounds per hundred square feet  
Gels: 8 - 15 10 second/10 minutes  
Total Hardness: 0 - <200 mg/l  
API Fluid Loss: 12 - 15 ml/30 minutes  
Total Solids: 0 - <10%

5,266' - 5,574'

Type: fresh water with gel + PHPA + LSND  
Weight: 8.8 - 14.5 pounds per gallon  
Funnel Viscosity: 35 - 45 seconds per quart  
Yield Point: 6 - 12 pounds per hundred square feet  
Gels: 12 - 15 10 second/10 minutes  
Total Hardness: 0 - <200 mg/l  
API Fluid Loss: 12 - 15 ml/30 minutes  
Total Solids: 0 - <10%

6. CORES, LOGS, & TESTS

No cores or drill stem tests are currently planned. Induction or laterolog,



Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah

PAGE 10

density/neutron, and sonic (possible dipole) logs will be run.

#### 7. DOWN HOLE CONDITIONS

A possible pressure kick in the Ismay will be prevented by using at least 10.6 pound mud. Hydrogen sulfide (H<sub>2</sub>S) in excess of 100 ppm is known to be present in the Desert Creek. Over balanced mud will be used near fluid breakout areas (e. g., flow line, shaker, floor connections) to minimize exposure. Thin coating amine will be run as a corrosion inhibitor to protect down hole equipment. Drilling operations will be conducted according to Resolute's March 2009 Greater Aneth H<sub>2</sub>S Operations and Contingency Plan (see Resolute's Aneth E221SE LDVL APD (43-037-31882)).

Water flows could be encountered in the Navajo sandstone. Resolute will have conductor pipe set, increase mud weight, and use a diverter to divert flow from around the substructure to the reserve pit.

Possible differential sticking could occur in the Desert Creek due to nearby production. If sticking occurs, spotting acid will be used to break free.

A two stage cement job will be used on the production casing to avoid problems due to a low fracture gradient.

#### 8. OTHER INFORMATION

The anticipated spud date is upon approval. It is expected it will take  $\approx$ 2-1/2 weeks to drill and  $\approx$ 1-1/2 weeks to complete the well.

Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah

PAGE 11

### Surface Use Plan

#### 1. DIRECTIONS & EXISTING ROADS (See PAGES 16 & 17)

From the Montezuma Creek Post Office ...  
Go North 4.45 miles on paved U-262  
Then turn left and go Southwest 1/2 mile on the West Montezuma Road  
Then turn right and go Northwest 1/8 mile on a dirt road onto the E317 pad  
The proposed E317X overlaps the E317

Roads will be maintained to a standard at least equal to their present condition.

#### 2. ROAD TO BE UPGRADED OR BUILT

Upgrading will be limited to blading out and rocking ruts. The road will not be widened or realigned. No new road is needed. The proposed pad overlaps an existing road and pad.

#### 3. EXISTING WELLS (See PAGE 17)

There are 3 plugged wells, 3 water wells, 26 water or carbon dioxide injection wells, and 28 oil wells within a mile radius. There are no existing gas wells within a mile.

#### 4. PROPOSED PRODUCTION FACILITIES (See PAGE 18)

Surface equipment will include a well head that will be painted a flat Carlsbad tan. The well will tie into the existing pipeline that crosses the pad. No power line is planned.



Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah

PAGE 12

5. WATER SUPPLY

Water will be trucked from Montezuma Well Service's already permitted existing water well in NWNE 36-40s-23e (09-1428; A60998) or Resolute's existing water wells in 31-40s-24e (Navajo Department of Water Resources Water Use Permit Numbers 06.0015 - 06.0020) for fresh water.

6. CONSTRUCTION MATERIALS & METHODS (See PAGES 18 - 20)

Blue Stakes of Utah Utility Notification Center, Inc. will be called (1-800-622-4111) at least 2 business days before construction starts. Notice can also be given on line via <http://www.bluestakes.org/HTML/DoltYourself.htm>

The top 6" of soil will be piled north of the pad. A diversion ditch will be cut west of the pad. No reserve pit will be used. A closed loop mud system with steel tanks will be used instead. Pad will be surfaced with rock purchased from a gravel pit west of Montezuma Creek.

7. WASTE DISPOSAL

Drill fluids will be reclaimed at Resolute's mud plant located 1.5 miles northwest of Aneth. Fluids unsuitable for reclamation will be hauled to Envirotech Land Farm near Farmington, NM. Drill cuttings will be solidified and hauled to Contract Environmental Services Hovenweep site. Human waste will be disposed of in chemical toilets, which will be hauled to a state approved dump station. All trash will be placed in a portable trash cage and hauled to the county landfill. No trash will be buried or burned.

8. ANCILLARY FACILITIES

There will be no air strip or camp. Camper trailers will be on location for the



Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah

PAGE 13

company man, tool pusher, and mud loggers.

#### 9. WELL SITE LAYOUT

See PAGES 18 - 20 for depictions of the well pad, cross section, cut and fill diagram, reserve pit, trash cage, access onto the location, parking, living facilities, and rig orientation.

#### 10. RECLAMATION & VEGETATION

After the well is completed, a circular berm with a 100' radius (guy line pattern) will be created from location dirt. All other areas not to be used in production will be interim reclaimed by spreading stockpiled top soil and seeding as stated below. When the well is plugged, the remaining top soil will be redistributed and seeded. The location will be returned to a natural shape. The gravel will be gathered and hauled to useful location and road sites in the Aneth Unit Field. Seed mix will consist of sand dropseed, Indian ricegrass, needle and thread grass, four wing saltbush, shadscale, and cliff rose.

Noxious weeds will be controlled in accordance with Navajo Nation EPA requirements. Call Glenna Lee at (928) 871-6447 for a list of approved herbicides and applicators.

#### 11. SURFACE OWNER

All construction will be on Navajo Tribal trust surface and on lease. Tribal Project Review Office address is P. O. Box 9000, Window Rock, AZ 86515. Their phone number is (928) 871-6447. Land use will be:

250' x 250' well site = 1.43 acres



Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah

PAGE 14

## 12. OTHER INFORMATION

Bertha Spencer and Lyle Ben (BIA), Pam Kyselka (Navajo Natural Heritage Program), Rita Whitehorse (Navajo EPA), Donnie Trimble (Resolute), and Tim Holman (Permits West) attended the June 7, 2012 on site inspection.

The nearest ( $\approx$ 10 minute drive) health care is the Montezuma Creek Clinic. Its phone number is (435) 651-3291. The nearest hospital is a  $\approx$ 1/2 hour drive to Blanding at 802 South 200 West. Hospital phone number is (435) 678-3993. Or dial 1-800-332-1911 from anywhere in the county.

## 13. REPRESENTATION & CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U. S. C. 1001 for the filing of false statements. Executed this 21st day of June, 2012.



-----  
Brian Wood, Consultant  
Permits West, Inc.

37 Verano Loop, Santa Fe, NM 87508

(505) 466-8120

FAX: (505) 466-9682

Cellular: (505) 699-2276

  
**PERMITS WEST**.INC.  
PROVIDING PERMITS for LAND USERS

Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah

PAGE 15

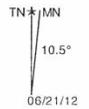
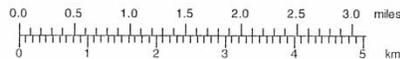
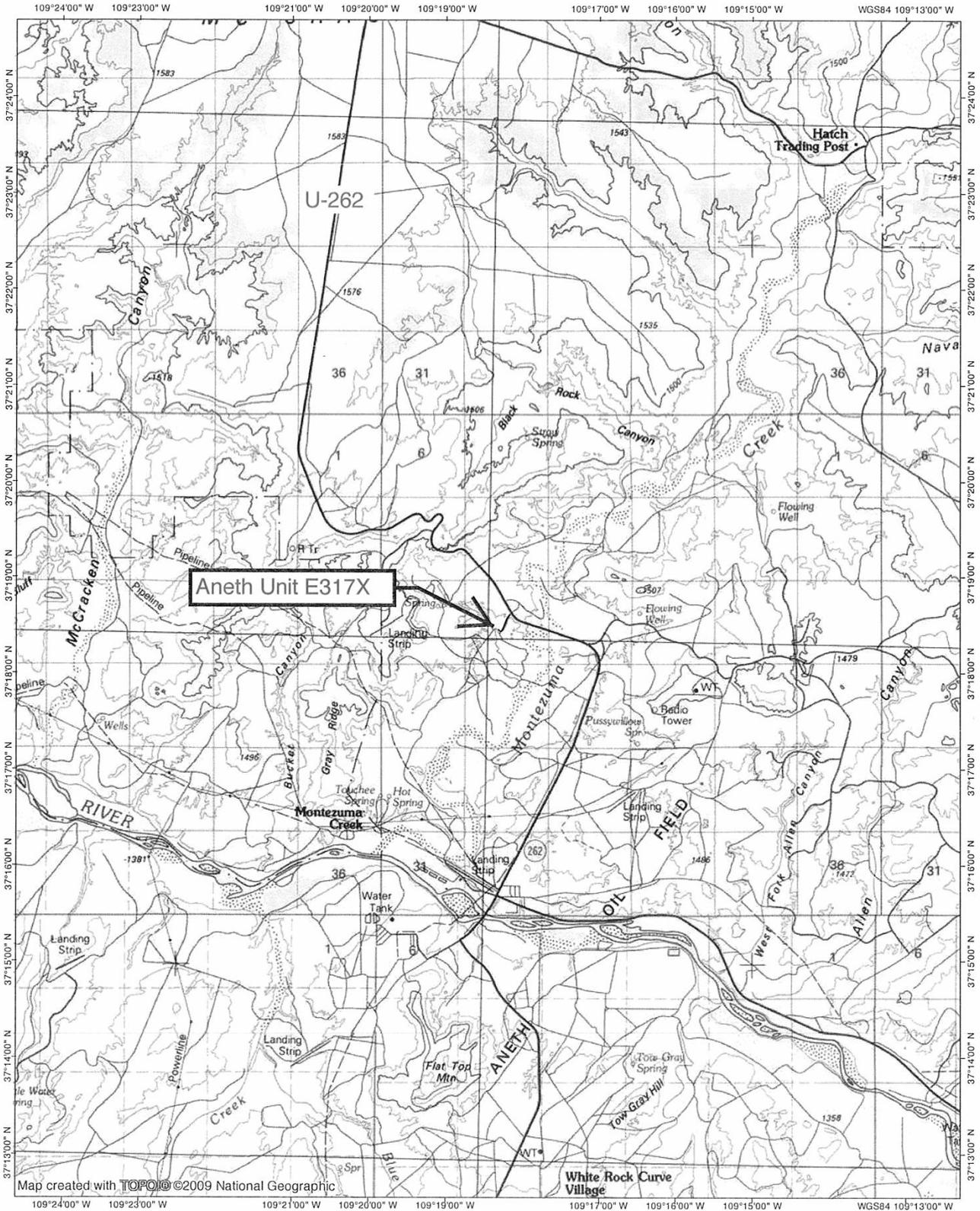
The field representatives will be:

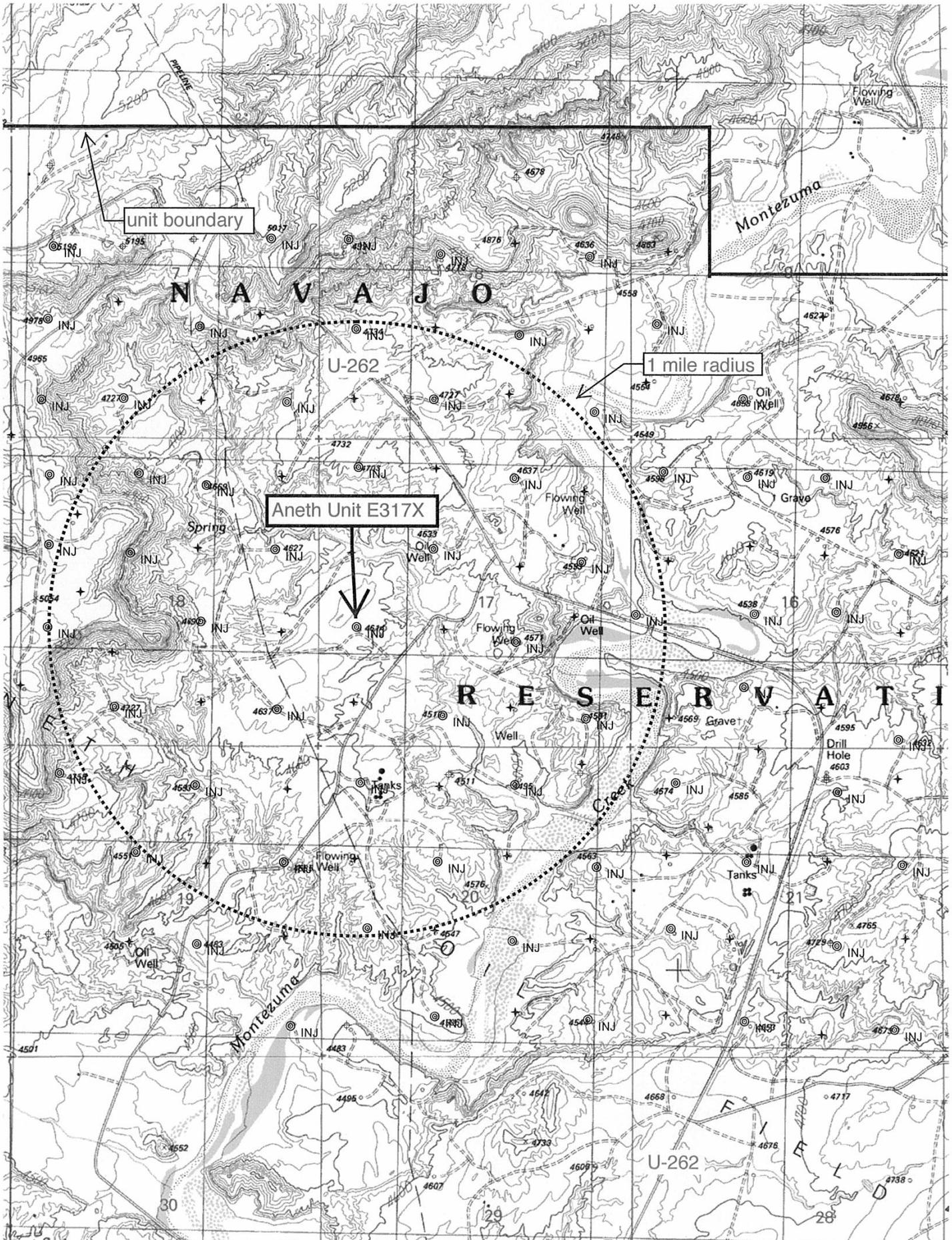
Dwight Mallory  
Resolute Aneth, LLC  
1675 Broadway, Suite 1950  
Denver, CO 80202  
(303) 573-4886, Extension 1165

Donnie Trimble  
Resolute Aneth, LLC  
P. O. Drawer G  
Cortez, CO 81321  
(970) 371-6753



TOPO! map printed on 06/21/12 from "Untitled.tpo"





# Well Pad - Aneth Unit E-317X

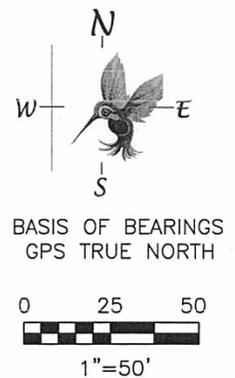
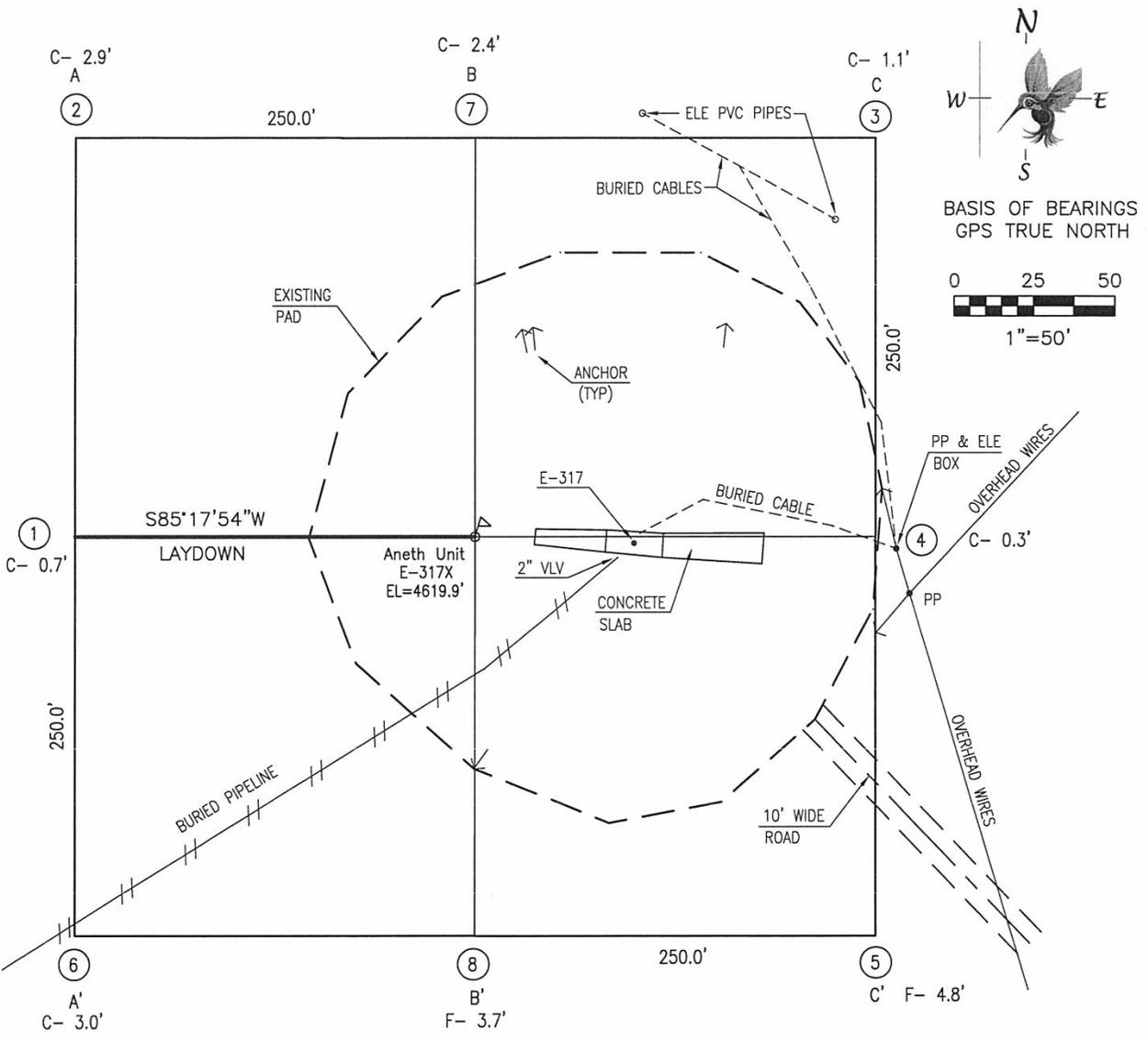
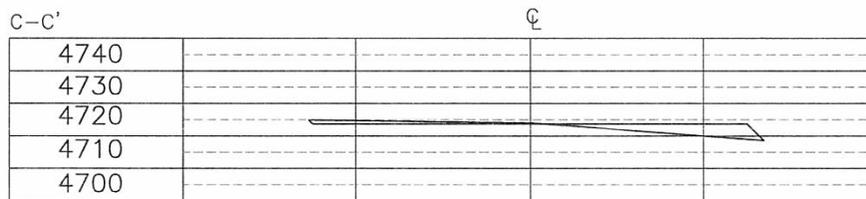
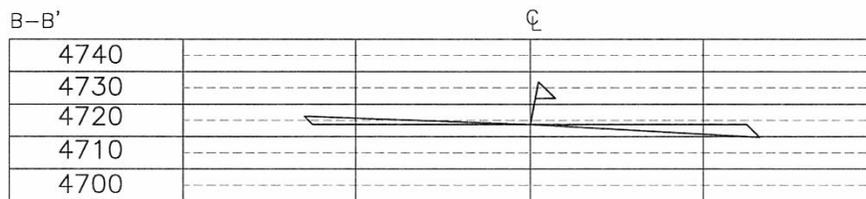
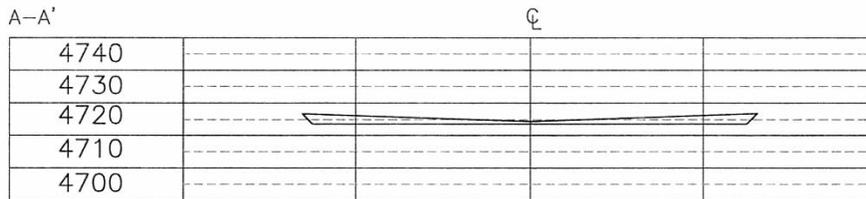


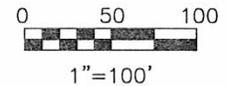
EXHIBIT B

FOOTAGE: 1984' FSL 609' FWL		<b>RESOLUTE</b> NATURAL RESOURCES	
SEC 17 T40S, R24E, SLM, SAN JUAN COUNTY, UT			
		SURVEYED: 02/01/12	
		DRAWN BY: GEL	DATE: 02/03/12
ELEVATION: 4719.9' at ground level (NAVD88)		NOTE:	
HUMMINGBIRD SURVEYING, LLC --- P.O. Box 416 Montezuma Creek, UT 84534 --- 970-570-5108			

## Aneth Unit E-317X Cross Section



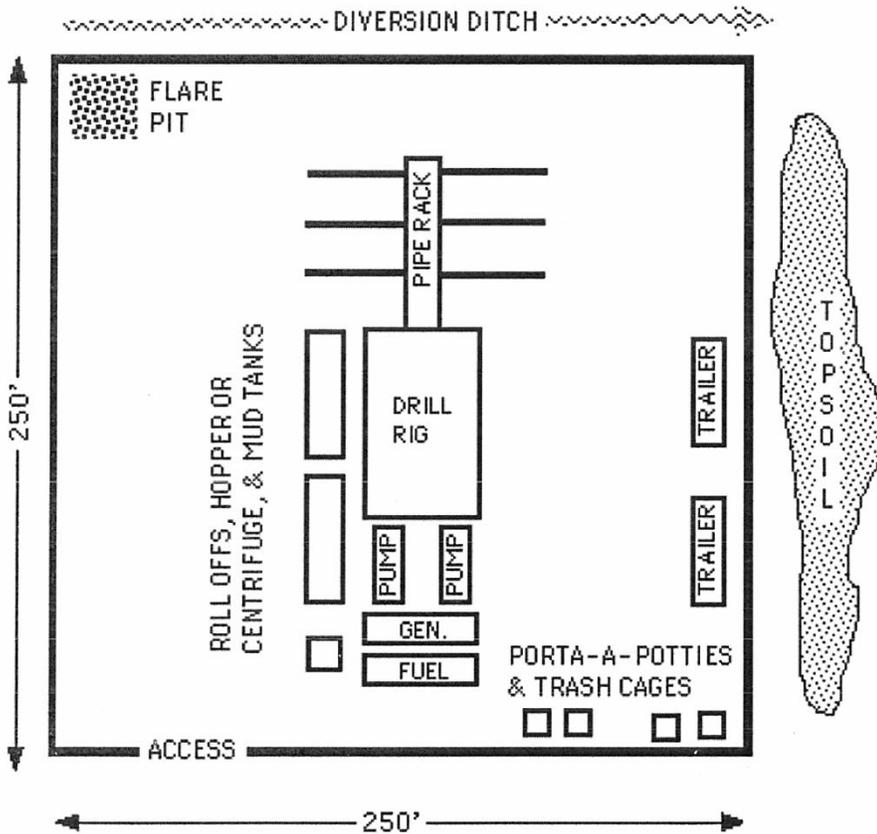
HORIZONTAL 1"=100'  
VERTICAL 1"=50'



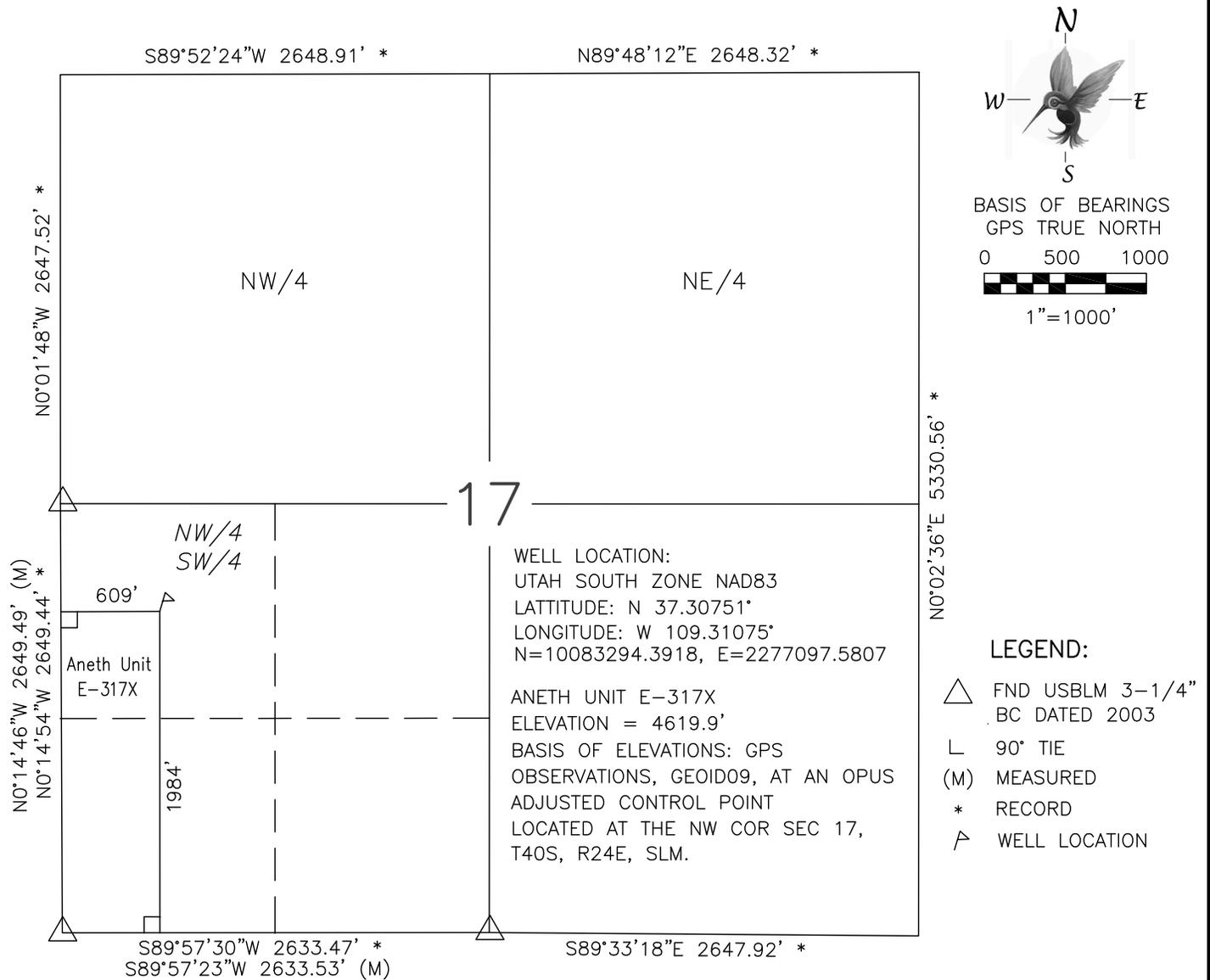
LEASE: Aneth Unit E-317X  
EXHIBIT C

FOOTAGE: 1984' FSL    609' FWL	<b>RESOLUTE</b> NATURAL RESOURCES		
SEC 17, T40S, R24E, SLM, SAN JUAN COUNTY, UT	SURVEYED: 02/01/12		
LAT: N 37.30751'    LON: W 109.31075' (NAD83)	DRAWN BY: GEL	DATE: 02/08/12	FILE:
ELEVATION: 4719.9' at ground level (NAVD88)	NOTE:		
HUMMINGBIRD SURVEYING, LLC --- P.O. Box 416 Montezuma Creek, UT 84534 --- 970-570-5108			

Resolute Aneth, LLC  
Aneth Unit E317X  
1984' FSL & 609' FWL  
Sec. 17, T. 40 S., R. 24 E.  
San Juan County, Utah



# Aneth Unit E-317X Well Location



I, Gerald G. Huddleston, do hereby certify that I am a registered Utah land surveyor holding certificate number 161297 as prescribed under the laws of the State of Utah, and I further certify that under authority of the owner I have surveyed the well location as shown hereon and that the same is correct and true to the best of my knowledge and belief.

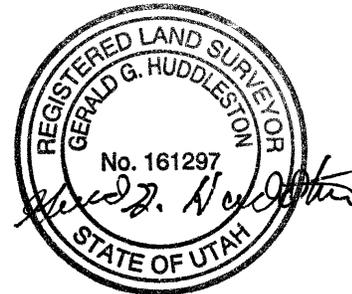
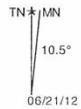
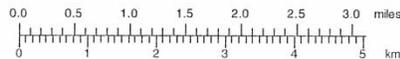
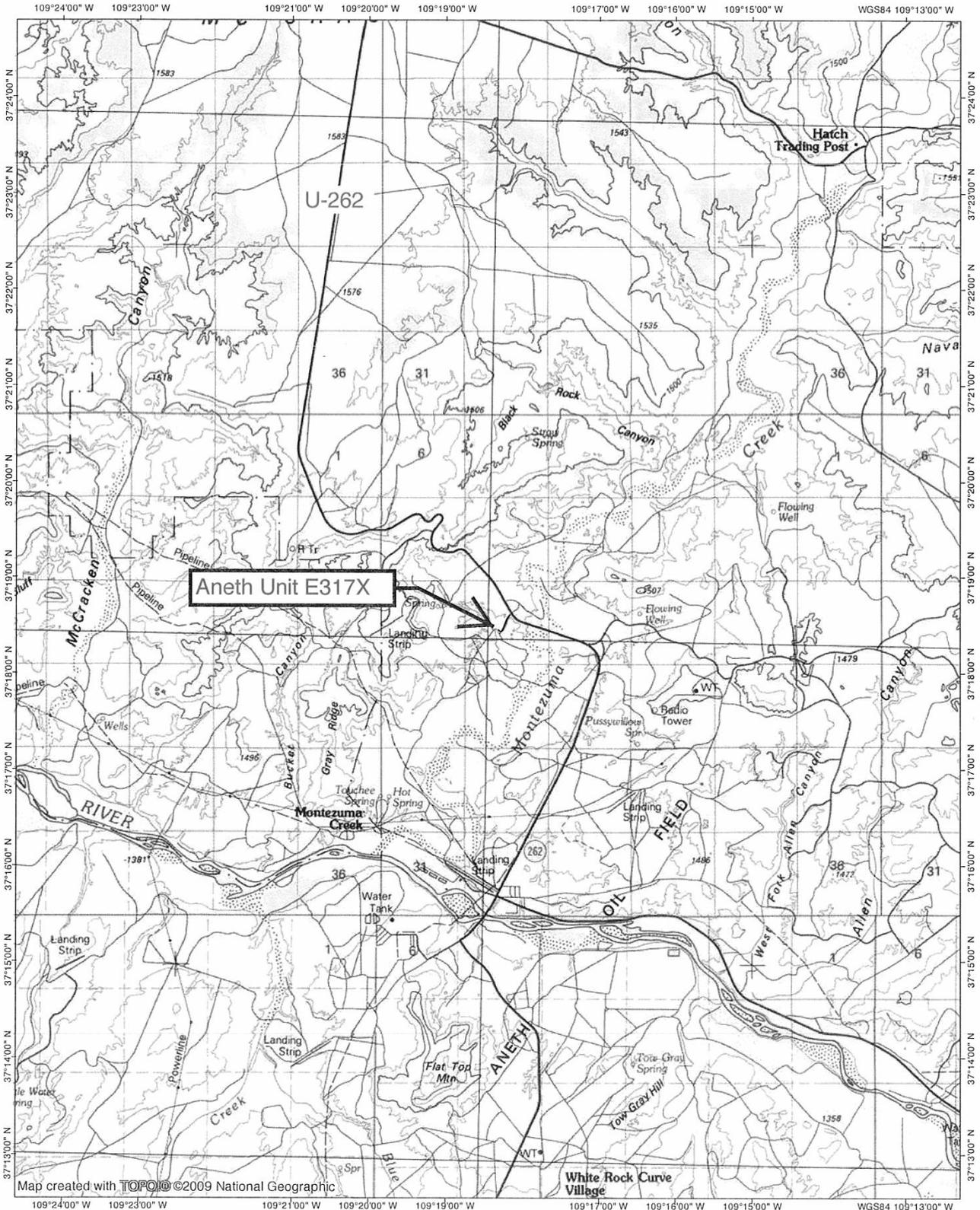


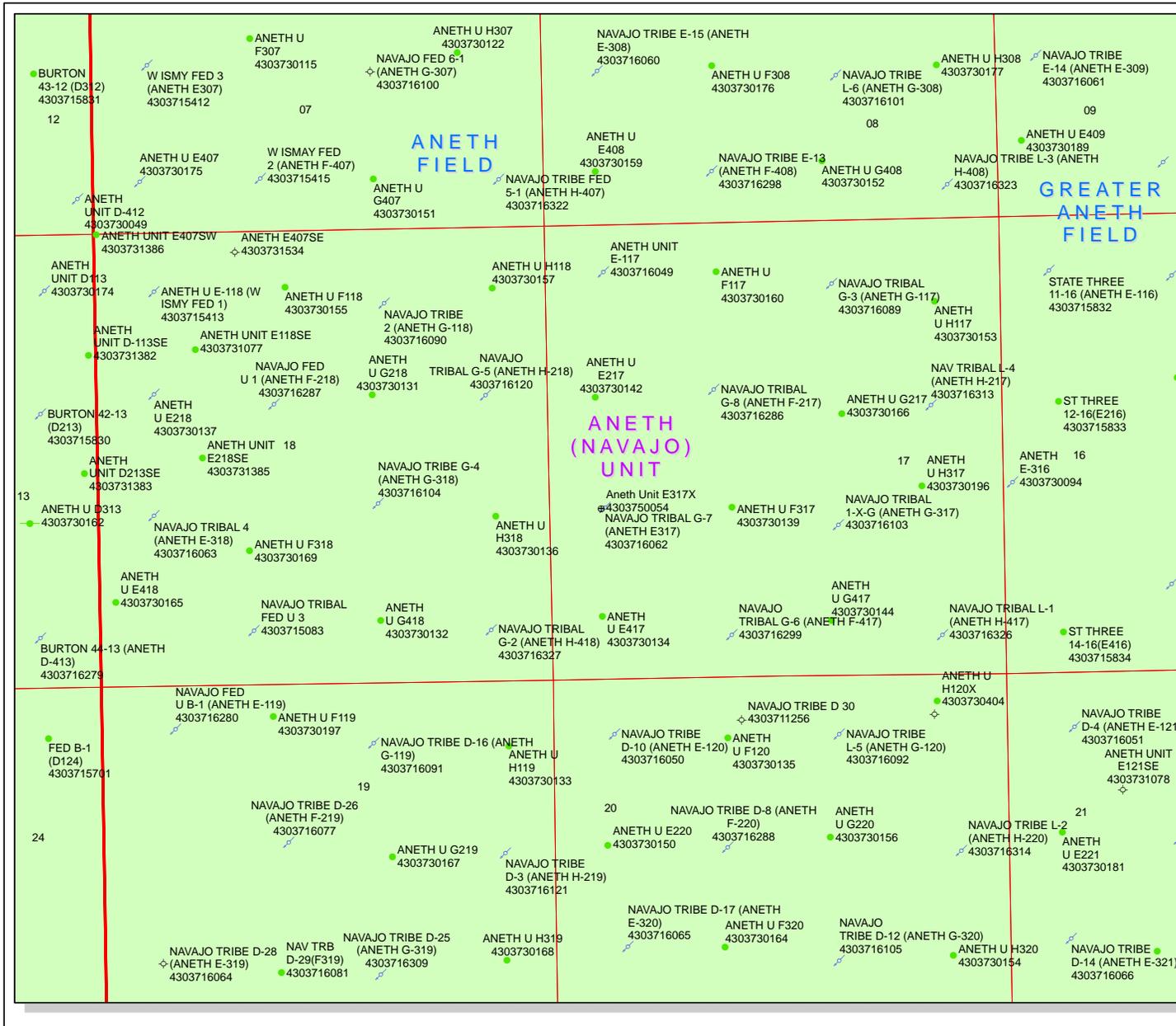
EXHIBIT A

FOOTAGE: 1984' FSL 609' FWL	<b>RESOLUTE</b> NATURAL RESOURCES		
SEC 17, T40S, R24E, SLM, SAN JUAN COUNTY, UT			
	SURVEYED: 01/31/12		
	DRAWN BY: GEL	DATE: 02/01/12	
ELEVATION: 4619.9' at existing ground level (NAVD88)	NOTE: 7/6/12 - CORRECTED WF ELEVATION		

HUMMINGBIRD SURVEYING, LLC --- P.O. Box 416 Montezuma Creek, UT 84534 --- 970-570-5108

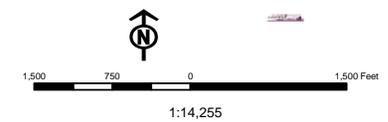
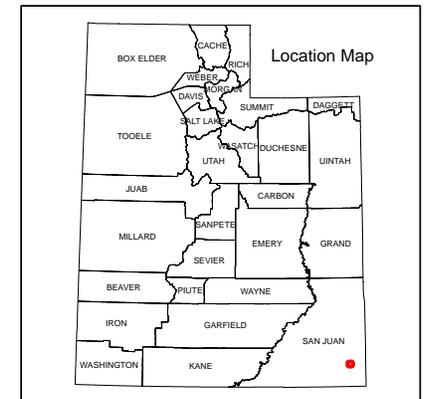
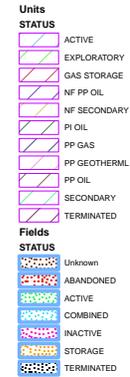
TOPO! map printed on 06/21/12 from "Untitled.tpo"





**API Number: 4303750054**  
**Well Name: Aneth Unit E317X**  
**Township T40.0S Range R24.0E Section 17**  
**Meridian: SLBM**  
**Operator: RESOLUTE NATURAL RESOURCES**

Map Prepared:  
 Map Produced by Diana Mason



## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 3/5/2013

API NO. ASSIGNED: 43037500540000

WELL NAME: Aneth Unit E317X

OPERATOR: RESOLUTE NATURAL RESOURCES (N2700)

PHONE NUMBER: 505 466-8120

CONTACT: Brian Wood

PROPOSED LOCATION: NSW 17 400S 240E

Permit Tech Review: 

SURFACE: 1984 FSL 0609 FWL

Engineering Review: 

BOTTOM: 1984 FSL 0609 FWL

Geology Review: 

COUNTY: SAN JUAN

LATITUDE: 37.30754

LONGITUDE: -109.31111

UTM SURF EASTINGS: 649670.00

NORTHINGS: 4130327.00

FIELD NAME: GREATER ANETH

LEASE TYPE: 2 - Indian

LEASE NUMBER: I-149-IND-8635

PROPOSED PRODUCING FORMATION(S): CHIMNEY ROCK

SURFACE OWNER: 2 - Indian

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: INDIAN - B001252
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 09-1428; A60998 or 06.0015-06.0020
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingle Approved

## LOCATION AND SITING:

- R649-2-3.
- Unit: ANETH
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: Cause 152-7
- Effective Date: 4/22/1998
- Siting: Does Not Suspend General Siting
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 4 - Federal Approval - dmason



GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

## Permit To Drill

\*\*\*\*\*

**Well Name:** Aneth Unit E317X  
**API Well Number:** 43037500540000  
**Lease Number:** I-149-IND-8635  
**Surface Owner:** INDIAN  
**Approval Date:** 3/19/2013

### Issued to:

RESOLUTE NATURAL RESOURCES, 1675 Boradway Ste 1950, Denver, CO 80202

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 152-7. The expected producing formation or pool is the CHIMNEY ROCK Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

### Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  <b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> I-149-IND-8635
---	--

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Navajo  <b>7. UNIT or CA AGREEMENT NAME:</b> ANETH
--	---

<b>1. TYPE OF WELL</b> Water Injection Well	<b>8. WELL NAME and NUMBER:</b> Aneth Unit E317X
--	---

<b>2. NAME OF OPERATOR:</b> RESOLUTE NATURAL RESOURCES	<b>9. API NUMBER:</b> 43037500540000
---	---

<b>3. ADDRESS OF OPERATOR:</b> 1675 Boradway Ste 1950 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 534-4600 Ext	<b>9. FIELD and POOL or WILDCAT:</b> GREATER ANETH
--	--	---

<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1984 FSL 0609 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 17 Township: 40.0S Range: 24.0E Meridian: S	<b>COUNTY:</b> SAN JUAN  <b>STATE:</b> UTAH
---	---

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 6/21/2013  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Resolute proposes to change the hole size-casing-cement volumes previously submitted in the APD package for this well, based on rig and casing availability. The updated program is attached.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining**

**Date:** June 19, 2013

**By:** *Derek Quist*

<b>NAME (PLEASE PRINT)</b> Sherry Glass	<b>PHONE NUMBER</b> 303 573-4886	<b>TITLE</b> Sr Regulatory Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 6/17/2013	

**HOLE SIZE AND CASING CHANGE SUNDRY FOR AU E317X**

Resolute would like to follow up with the verbal approval given to change the surface and production hole and casing sizes. The original surface hole size of 14-3/4" and 10-3/4" 40.5# J-55 will be changed to a 12-1/4" hole size and 9-5/8" 36# J-55. The original production hole size of 9-7/8" will be changed to an 8-3/4" hole. Production casing size/grade/weight will remain the same. Detailed casing and cement design changes included.

**Surface Casing and Cement**

<b>Surface</b>	Hole Size	Depth	Mud Wt	Mud Hydr Press	Cement Wt	Cmt Hyd Press	Delta Press	
	12.25	1414	9.00	651.75	12.4/15.8	945.79	284.04	
	Casing Size	Grade	Cplg	Wt/ft	Collapse	Internal Yield	Joint Strength	Pipe Yield
	9.63	J-55	STC Rd	36	2020	3520	394,000	564,000
<b>Cement</b>	SF = Collapse 1.125, Internal Press 1.00, Joint Strength 1.80, Pipe Yield 1.25							
		Type	Wt	Yield	Vol-bbl	Vol-Sks	Additives	
	Lead	Prem Light	12.3	1.97	140	400	5 lb/sk Gilsonite, 0.4% Halad 9, 0.125 lb/sk Poly-E-Flake	
<b>Stg Tool</b>	Tail	Premium	15.8	1.15	20	100	0.125 lb/sk Poly-E-Flake, 3% Halad R 9	
	Lead							
<b>Shoe Cntrlzrs</b>	Tail							
		HES Trophy, Auto Fill						
	API 9-5/8" (5): 4 on bottom jt, 1 jt at 80'							
<b>Other</b>								

**Production Casing and Cement**

<b>Surface</b>	Hole Size	Depth	Mud Wt	Mud Hydr Press	Cement Wt	Cmt Hyd Press	Delta Press	
	8.75	5266	10.00	2738.32	12.4/15.8	3652.97	914.65	
	Casing Size	Grade	Cplg	Wt/ft	Collapse	Internal Yield	Joint Strength	Pipe Yield
	7.00	J-55	LTC Rd	26	4320	4980	367,000	415,000
<b>Cement</b>	SF = Collapse 1.125, Internal Press 1.00, Joint Strength 1.80, Pipe Yield 1.25							
		Type	Wt	Yield	Vol-bbl	Vol-Sks	Additives	
	Lead	Light Prem	12.4	1.95	89	260	5 lb/sk Gilsonite, 0.125 Poly-Flake, 0.3% Retarder	
<b>Stg Tool</b>	Tail	Premium	15.8	1.31	20	100	0.125 Poly-Flake, 0.1% Fluid Loss Control	
	HES Type P ES Stage Tool at ~ 2,500'							
	Lead	Light Prem	12.4	1.95	63	180	5 lb/sk Gilsonite, 0.125 Poly-Flake, 0.3% Retarder	
<b>Shoe Cntrlzrs</b>	Tail	Premium	15.8	1.15	20	100	0.1% Fluid Loss Control	
	HES float shoe & HES Float Collar							
	API 9-5/8" (5): 4 on bottom jt, 1 jt at 80'							
<b>Other</b>								

# DIVISION OF OIL, GAS AND MINING

## SPUDDING INFORMATION

Name of Company; RESOLUTE NATURAL RESOURCES

Well Name: ANETH UNIT E317X

Api No: 43-037-50054 Lease Type INDIAN

Section 17 Township 40S Range 24E County SAN JUAN

Drilling Contractor D & J DRILLING RIG # 1

### SPUDED:

Date 06/06/2013

Time \_\_\_\_\_

How DRY

**Drilling will Commence:** \_\_\_\_\_

Reported by ROBERT

Telephone # (505) 860-5130

Date 06/04/2013 Signed CHD

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> I-149-IND-8635
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Navajo
		<b>7. UNIT or CA AGREEMENT NAME:</b> ANETH
<b>1. TYPE OF WELL</b> Water Injection Well	<b>8. WELL NAME and NUMBER:</b> Aneth Unit E317X	
<b>2. NAME OF OPERATOR:</b> RESOLUTE NATURAL RESOURCES	<b>9. API NUMBER:</b> 43037500540000	
<b>3. ADDRESS OF OPERATOR:</b> 1675 Boradway Ste 1950 , Denver, CO, 80202	<b>PHONE NUMBER:</b> 303 534-4600 Ext	<b>9. FIELD and POOL or WILDCAT:</b> GREATER ANETH
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1984 FSL 0609 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 17 Township: 40.0S Range: 24.0E Meridian: S		<b>COUNTY:</b> SAN JUAN
		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/23/2013	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION  <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	
	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.		
Resolute spud the referenced well on 06/15/2013. Daily activity report is attached.		
<b>Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY July 23, 2013</b>		
<b>NAME (PLEASE PRINT)</b> Shery Glass	<b>PHONE NUMBER</b> 303 573-4886	<b>TITLE</b> Sr Regulatory Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/23/2013	



## Daily Activity Report

Well Name: E317X Aneth Unit

API Number 49037500540000	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Well Spud Date/Time 6/16/2013 13:30	Rig Release Date/Time 7/5/2013 06:00	

Job Category Drilling	Primary Job Type Drilling - original	Secondary Job Type
Start Date 6/15/2013	End Date	AFE Number 10012001
Objective Drill and complete an injector well. Two strings of casing will be set in the well, with 7" intermediate set in the upper Ismay. Mud logger and OH logs will be run.		
Contractor D&J	Rig Number 1	Rig Type Drilling - Double
Contractor Four Corners Well Service	Rig Number 6	Rig Type
Report Start Date 5/28/2013	Report End Date 5/28/2013	Operations Summary Break up cement pad, load and haul off cement, hauled equipment to location
Report Start Date 5/29/2013	Report End Date 5/29/2013	Operations Summary Load and haul cement and back fill
Report Start Date 5/30/2013	Report End Date 5/30/2013	Operations Summary Build and widen location for rig
Report Start Date 6/10/2013	Report End Date 6/10/2013	Operations Summary Dig up wellhead, dig for cellar, set and fit box
Report Start Date 6/12/2013	Report End Date 6/12/2013	Operations Summary Pre fab 16" for conductor casing for new well
Report Start Date 6/13/2013	Report End Date 6/13/2013	Operations Summary Weld 3 joints of 16" conductor casing
Report Start Date 6/14/2013	Report End Date 6/14/2013	Operations Summary Set conductor casing.
Report Start Date 6/15/2013	Report End Date 6/16/2013	Operations Summary Safety meeting w/ rig crew, Dawn Trucking loaded equipment and road to new location. Spot equipment, RU derrick in the air @ 11:00 am. Continue RU well flange on conductor pipe. Cut and weld flange on flow line, NU mud cross, hydrill, diverter, flowline, NU choke to flex hose.
Dur (hrs)		Comment
		5.00 load equipment move f/mcu k 18 to au 317x 10.00 set equipment r/u derrick up @ 11:00 am 3.00 weld flange on conductor 6.00 n/u mud cross, spacer spool by drill rotateing head, flow line
Report Start Date 6/16/2013	Report End Date 6/17/2013	Operations Summary safety meeting w/rig crew, run hard line to lay down tank, Drlg rat and mouse hole, P/U surface BHA, Tag cement @ 95', Drlg surface hole f/95' - t/660', Surveys at 70' - 1*, 336' - 1*, 549' - 3/4 *
Dur (hrs)		Comment
		2.00 run hard line to lay down tank 2.00 move equipment ,unload mud spot mud loggers trailer 2.00 p/u rat hole motor drlg rat & mouse 1.50 l/d rat hole motor p/u new bha 0.50 p/u 2 8" d/c 1.00 tag @ 95' drlg to 115" 1.00 survey @ 70' 1/4 deg 6.00 Drlg F/115' - T/386' 0.50 Wire line survey @ 336' - 1 deg 6.00 Drlg F/386' - T/599' 0.50 Wire line survey @ 549' - 3/4 deg 1.00 Drlg F/599' - T/660'
Report Start Date 6/17/2013	Report End Date 6/18/2013	Operations Summary Drlg surface hole f/660' - t/1434', Surveys at 741' - 3/4*, 928' - 1*, 1240' - 3/4 *, 1394' - 1/2 *, Circulate, Survey, Flow check, Circulate.  Note; water flow encountered at 1384', Flow check at TD well making 42bbls/hr, Flow check after circulating at reduced rate 1 bbl/hr, We will spot a 80 bbl pill of mud on bottom from bulk plant.
Dur (hrs)		Comment
		2.00 Drlg F/660' - T/780' 0.50 Wireline survey @ 741' - 3/4 degree 2.00 Drlg F/780' - T/968' 0.50 Wireline survey @ 928' - 1degree 8.00 Drlg F/968' - T/1280' 0.50 Wireline survey @ 1240' - 3/4degree



## Daily Activity Report

Well Name: E317X Aneth Unit

API Number 49037500540000	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Well Spud Date/Time 6/16/2013 13:30	Rig Release Date/Time 7/5/2013 06:00	

Dur (hrs)	Comment
6.00	<p>Drig F/1280' - T/1434' (TD)</p> <p>Note; Water flow encountered @ 1384'</p> <p>1.00 Pump 2 high vis sweeps, Circulate and condition mud</p> <p>0.50 Wireline survey @ 1394' - 1/2 degree</p> <p>Note; Flow check well making 42bbl/hr.</p> <p>1.50 Circulate at reduced pump rate.</p> <p>0.50 Flow check, No flow.</p> <p>0.50 Circulate at reduced pump rate.</p> <p>0.50 Flow check, No flow.</p>

Report Start Date 6/18/2013	Report End Date 6/19/2013	<p>Operations Summary</p> <p>Circulate and condition mud, Well flowing 14bbls/hr, Mix and spot 60 bbl pill @ 10.1 MW on bottom. Flow check, Well flowing @ 14bbls/hr, POOH, N/D rotating head and flow line, Test all H2S equipment with ABC fire and safety, Run 34 jts 9 5/8" 36#, J55 set at 1430', Circulate, Cement surface casing, No cement returns to surface, WOC, Perform top out cement job, 5 bbls returns to surface, R/D cement top out line, Check cement top, Cement fell back to 55', WOC</p> <p>Note; Halliburton sent truck to town for more top out cement, Will perform top out when truck returns.</p>
--------------------------------	------------------------------	--

Dur (hrs)	Comment
1.00	Circulate and condition mud, Well flowing 14bbls/hr, transfer 200 bbls water to lay down tank
1.00	Mix and spot 60 bbl pill @ 10.1 MW on bottom.
0.50	Flow check, Well flowing @ 14bbls/hr
4.00	POOH and lay down all drill pipe, 4 HWDP, 12 - 6.25" DC's and 2 - 8" DC's
1.00	N/D rotating head and flow line.
0.50	Test all H2S equipment with ABC fire and safety
0.50	PJSM and R/U San Jaun casing crew
2.50	Run 34 jts 9 5/8" 36#, J55 casing as follows, Float shoe, 1- jt 9 5/8" 36#, J55, Float collar, 33 jts 9 5/8" 36#, J55 set at 1430'.
2.50	Circulate and recipcate casing on bottom.
2.50	PJSM, Cement as follows, Pressure test lines to 2500 psi, Pump 10bbl FW spacer, Pump 20 bbls super flush spacer, Pump 10bbl FW spacer, Pump 390 sks @ 12.3#, 1.97 yield (136 bbls) lead Halliburton premium lite-SBM cement with 5 lbm Kol-Seal bulk, 0.125 lbm Poly-E-Flake, 2% Calcium Chloride with FW @ 10.173 gal/sk, Pump 100 sks @ 15.8#, 1.15 yield, (20.5 bbls) tail cement with, 94 lbm Premium-Class G Reg, 0.125 lbm Poly-E-Flake with FW @ 4.968 gal/sk, Shut down, Drop plug, Displace with 107 bbls FW, FCP 345, Bump plug @ 21:03 on 6-18-13, Check floats, Bleed back 1 bbl to tank, Pressure test casing @ 1500 psi for 30 min, Check floats. No cement returns to surface
4.00	WOC, make up 1" tremmie pipe for top out job.
1.00	Pump top out job as follows, Pump .5 bbl FW, Pump 100 @ 15.8#, 1.15 yield, (20.5 bbls) top out cement with, 94 lbm Premium-Class G Reg, 0.125 lbm Poly-E-Flake with FW @ 4.968 gal/sk, 5 bbls back to surface, Calculated cement top @ 210'.
3.00	WOC, Cement fell back to 55', Halliburton sent Bulk truck back to town for more top out cement, Will perform top out when truck returns.

Report Start Date 6/19/2013	Report End Date 6/20/2013	<p>Operations Summary</p> <p>WOC, Cement fell back to 75', L/D cement head, P/U annular, Rough cut conductor casing, Top out cement as follows, Pump .5 bbls FW, Pump 13 bbls top out cement @ 15.8 ppg, Yield 1.15, 4bbls cement to surface, Calculated cement top @ 145', N/D down annular, Weld on Wellhead, N/U 11" BOPE, R/U gas buster, Pressure test BOPE equipment, Continue R/U gas buster.</p>
--------------------------------	------------------------------	--

Dur (hrs)	Comment
5.00	WOC, Clean mud tanks, Cement fell back to 75'
3.00	L/D cement head, P/U annular, Rough cut conductor casing
2.00	Top out cement as follows, Pump .5 bbls FW, Pump 63 63 sks (13 bbls) @ 15.8 ppg, Yield 1.15 with 5 gal/sks, 4bbls cement to surface, R/D Halliburton cementers. Calculated cement top @ 145'
7.00	N/D down annular, Weld on Wellhead type 11" x 3000, C22 bowl, R/U gas buster
5.00	N/U 11" BOP, Annular, Rotating head and stinger to choke, R/U gas buster
2.00	Pressure test BOPE equipment, Continue R/U gas buster.

Report Start Date 6/20/2013	Report End Date 6/21/2013	<p>Operations Summary</p> <p>Pressure test BOPE, Cut 120' drlg line, R/U hard lines to LD tank, P/U directional BHA, Drl shoe track, FIT, Drlg intermediate hole section from 1434' - t/2012'</p>
--------------------------------	------------------------------	---

Dur (hrs)	Comment
3.00	Pressure test pipe rams, blind rams, kill line valves, choke manifold inner and outer valves 250 psi low 5 min, 3000 psi high 10 min and annular to 1500 psi for 10 min



## Daily Activity Report

Well Name: E317X Aneth Unit

API Number 49037500540000	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Well Spud Date/Time 6/16/2013 13:30	Rig Release Date/Time 7/5/2013 06:00	

Dur (hrs)	Comment	
1.50	Cut 120' drlg line	
1.00	Lay hard lines from choke to lay down tank	
2.50	PJSM, P/U directional tools, Set motor @ 1.5 degree, P/U 6 - 61/4" DC's, 15 - joints 4 1/2" HWDP	
3.00	P/U 22 joints 4 1/2" drill pipe, P/U kelly install rotating head rubber, adjust shims in kelly bushings and install kelly drivers. Tag cement at 1375'	
1.00	Drlg cement and shoe track f/1375' - t/1434' and 2 foot new hole	
0.50	FIT, Pressure up to 200 psi bleed back to and stabelized @ 120 psi.	
6.00	Drlg f/1436' - t/1682, RPM 50, GPM 672, WOB 15, Mtr RPM 188	
5.50	Drlg f/1682' - t/2012, RPM 50, GPM 670, WOB 17, Mtr RPM 187	
Report Start Date 6/21/2013	Report End Date 6/22/2013	Operations Summary Drlg F/2012' - T/2670. Change out catch tank, drlg F/2670' - T/2899'.
Dur (hrs)	Comment	
6.00	Drlg F/2012' - T/2156, RPM 50, GPM 687, WOB 17, Mtr RPM 192, SPP 1385	
6.00	Drlg F/2156' - T/2473', RPM 50, GPM 672, WOB 17, Mtr RPM 188, SPP 1400, Diff presure 168	
6.00	Drlg F/2473' - T/2670', RPM 50, GPM 697, WOB 118, MTR RPM 195, SPP 1222, Diff presure 69.5	
0.50	Change out catch tank	
5.50	Drlg F/2670' - T/2899', RPM 50, GPM 442, WOB 20, MTR RPM 123, SPP 1478, Diff presure 112.4	
Report Start Date 6/22/2013	Report End Date 6/23/2013	Operations Summary Drlg intermediate hole section F/2899' - T/3457'.
Dur (hrs)	Comment	
6.00	Drlg F/2899' - T/3029', RPM 50, GPM 482, WOB 23, MTR RPM 135, SPM 132, SPP 1650, Diff pressure 393	
6.00	Drlg F/3029' - T/3189', RPM 50, GPM 464, WOB 22, MTR RPM 130, SPM 127, SPP 1566, Diff pressure 393	
6.00	Drlg F/3189' - T/3292', RPM 50, GPM 669, WOB 20, MTR RPM 128, SPM 125, SPP 1614, DIFF 223	
6.00	Drlg F/3292' - T/3457', RPM 50, GPM 435, WOB 22, MTR RPM 189, SPM 125, SPP 1601, Diff PSI 303	
Report Start Date 6/23/2013	Report End Date 6/24/2013	Operations Summary Drlg F/3457' - T/3600', Condition and circulate mud, drlg F/3600' - T/3709', condition and circulate mud. TOOH for bit #2, LD motor, PU new motor and bit. TIH tag at 2460', wash and ream through bridge. TIH tag @ 3660' - 49' fill. Wash and ream to bottom, drill F/3709' - T/3733'.
Dur (hrs)	Comment	
6.00	Drlg F/3457' - T/3573', RPM 50, GPM 475, WOB 22, MTR RPM 133, SPM 130, SPP 1750, Diff PSI 411	
1.50	Drlg F/3573' - T/3600', RPM 50, GPM 464, WOB 19, MTR RPM 130, SPM 130, SPP 1640, Diff PSI 241, ROP 18'/hr	
1.50	Condition and Circulate mud, Excessive shale over shaker screens 1/4" to 1 1/2" in size, Mix bar bring mud weight from 9.3# MW to 9.5#	
5.50	Drlg F/3600' - T/3709', RPM 70, GPM 453, WOB 26, MTR RPM 126, SPM 124, SPP 1693, Diff PSI 219, ROP 20'/hr	
0.50	Condition and Circulate mud, For bit trip	
3.00	TOOH with bit #2, lay down mud motor. Pulled through tight spot @ 2337'	
2.50	P/U new motor and bit, orintate dir. tools, TIH tag bridge @ 2460'	
0.50	P/U kelly, wash and ream through bridge @ 2460'	
1.00	Continue TIH tag 49' of fill @ 3660'	
1.50	Wash and ream F/3660' - T/3709'	
0.50	Drlg F/3709' - T/3733', RPM 65, GPM 438, WOB 15, MTR RPM 74, SPM 120, SPP 1604, Diff PSI 77, ROP 24'/hr	
Report Start Date 6/24/2013	Report End Date 6/25/2013	Operations Summary Drill intermediate hole F/3733' - T/4769'
Dur (hrs)	Comment	
2.00	Drlg F/3733' - T/3796', RPM 70, GPM 656, WOB 18, MTR RPM 74, SPM 120, SPP 1604, Diff PSI 77, ROP 24'/hr	
0.50	Service Rig	
6.00	Drlg F/3796', T/4175, RPM 70, GPM 442, WOB 16, MTR RPM 74, SPM 121, SPP 1825, DIFF PSI 392, ROP 31'/hr	
6.00	Drlg F/4175', T/4419, RPM 70, GPM 443, WOB 18, MTR RPM 75, SPM 127, SPP 1955, DIFF PSI 443, ROP 40'/hr	
6.00	Drlg F/4419', T/4624, RPM 70, GPM 456, WOB 18, MTR RPM 77, SPM 125, SPP 2021, DIFF PSI 668, ROP 43'/hr	
3.50	Drlg F/4624', T/4769, RPM 64, GPM 456, WOB 20, MTR RPM 77, SPM 125, SPP 1972, DIFF PSI 668, ROP 41'/hr	
Report Start Date 6/25/2013	Report End Date 6/26/2013	Operations Summary Drlg F/4769', T/4840' - ROP 35'/hr. Rig Service, drlg F/4840', T/5087' - ROP 45'/hr. Change out cutting bin. Drlg F/5087', T/5389' - ROP 46'/hr. TD @ 5389' on 6-25-13 @ 23:30. Circulate pump sweeps, POOH F/5389' - T/4226'. PU kelly, wash and ream through tight spot @ 4226'. Pump high vis sweep. Set back kelly. Continue POOH F/4226' - T/729.51'.
Dur (hrs)	Comment	
2.00	Drlg F/4769', T/4840, RPM 65, GPM 458, WOB 21, MTR RPM 78, SPM 126, SPP 1985, DIFF PSI 671, ROP 35'/hr	
0.50	Rig Service,	
5.50	Drlg F/4840', T/5087', RPM 65, GPM 452, WOB 17, MTR RPM 75, SPM 120, SPP 1933, DIFF PSI 212, ROP 45'/hr	
0.50	Close loop solids container full, had to replace with clean container.	
9.00	Drlg F/5087', T/5389', RPM 71, GPM 465, WOB 20, MTR RPM 77, SPM 124, SPP 2000, DIFF PSI 327, ROP 46'/hr, TD @ 5389' on 6-25-13 @ 23:30	
1.00	Pump Sweep & Cuculate condition two bottoms ups @ intermediate TD. Flow check - no flow	



## Daily Activity Report

Well Name: E317X Aneth Unit

API Number 49037500540000	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Well Spud Date/Time 6/16/2013 13:30	Rig Release Date/Time 7/5/2013 06:00	

Dur (hrs)		Comment
		1.00 POOH F/5389' - T/4226'
		2.00 P/U kelly wash and ream through tight spot @ 4226', Pump high vis sweep. Set back kelly. Flow check - no flow
		2.50 Continue POOH F/4226' - T/729.51
Report Start Date 6/26/2013	Report End Date 6/27/2013	Operations Summary TOOH, run open-hole log with Weatherford. TIH with cone bit, bring mud wt up to 10.3. Circulate, rotate and clean up 21' of fill. TOOH 20 stands, circulate condition hole. TIH with 20 stands, no fill. Rotate, circulate and condition hole. TOOH LD 4-1/2" drill pipe and BHA. RU casing crew to run 7" casing.
Dur (hrs)		Comment
		0.50 TD Intermediate hole section @ 5389' stood back pipe in derick.
		5.50 Rigged up Weatherford wireline, Weatherford TIH with logging tools, Tagged 21' of fill, Tagged @ 5368'
		6.50 TIH to clean hole tagged 18' of fill.
		1.50 Curculate & codition hole, build mud wt to 10.4lb.
		2.00 Rotating to clean hole,
		2.00 Short trip 20 stands,
		0.50 circulate condition hole, no fill.
		4.50 TOOH laying down 4-1/2" DP @ BHA.
		1.00 Rigging up casing crew to run 7" casing. Marking centralizers,
Report Start Date 6/27/2013	Report End Date 6/28/2013	Operations Summary Safety meeting with all personnel on location. Running 7" casing, cement 7" casing w/ full returns to surface. N/U 11" 3M BOPE.
Dur (hrs)		Comment
		1.50 Safety Meeting with all Vendors working on the E317X Aneth Unit, Resolute personal attending Donnie Trimble, & Troy Begay.
		6.00 JSA Pre job meeting with rig crew & San Juan casing on runing in 7" casing.
		Landed 122 JNTS of 7" 26lb J-55 casing, float shoe set at 5388' Float collar set @ 5341', Cement stage tool set @ 2513'. We did not encounter any drag when running casing. Circulated every 30 JNTs did not get any excevie solid returns.
		3.50 Job as follows, JHA pre job meeting. Then Halliburon rigged up. Pressure tested cement lines, Then we started 1st stage cement job, pump 4 bbl water ahead, pump 4bbl mud flush, pump 4bbl water behind, pumped 247sks cement (12.3 ppg 1.97 yield 10.24 gals.) Pump 1st stage tail W/ 85sks cement @ 15.8 ppg, 1.16 yield, 5.08 gals. shut down end end 1st stage cemnet job, Drop dart plug, pump & displacement W/ 91 bbls muud swapped to 10 bbls H2O and finish displacement with 102.9bbls mud, slow rate to 2 bbls min last 10bbls, land plug @ 600psi, check floats flow bak to tanks remove plug container cap drop opening device, pressue up to open stage tool circulate cement to surface @ 86 bbls gone total cement to surface 8 bbls returs, shut down @ 100 bbls& then rig circulated for 4.5 hrs.
		6.00 Circulate after 1st stage cement job 9.6 lbs mud 6 hours, good returns.
		1.50 2nd stage cement job as follows, Pump 10 bls fresh water ahead, pump 20 bbl mud flush, pump 10bbl water behind, pupmp 240sks lead cement @ 12.3ppg 1.97 yield. 10.24gal/sks, pump 75sks tail cement @ 15.8ppg 1.16 yield 5.08gal/sks, shut down end 2nd stage cement, drop top plug, pump 95.9 displacement W/produced water, slow rate last 10bbl to 2bbl min, plug landed@ 690 psi, bump up to 1520 psi close DV tool, floats held, end 2nd stage food returns thru out job/ cement to surface total 4bbls back.
		5.50 N/U DSA 11" 3M BOPE stack with 3-1/2 rams on 7-1/16 casing head. Tested to 1500 psi test did hold ( Good Test).
Report Start Date 6/28/2013	Report End Date 6/29/2013	Operations Summary Rig up flow lines from BOPE and gas buster. TIH with 3-1/2" DP and 6-1/8 BHA to top of DV tool @ 2513'. Clean mud pits, pressure testing BOPE and 7" casing.
Dur (hrs)		Comment
		4.50 JSA pre tour meeting, Finishing N/U 11" 3M BOPE with 3-1/2 rams on 7-1/6 casing head. Hot work permit issued by ABC fire and safety to work on flow lines off gas buster and off BOPE.
		13.00 Jsa pre tour meeting, Clean rig and close loop mud pits, pumped 9.6lb mud into frack tanks to store for use on next well, clean mud pits to not contaminate produced water that we will drill the 6-18" hole section with. Dawn trucking hauled off excess water from pits to disposal.
		6.50 JSA Pre-Tour meeting to test BOPE and 7" casing. test 3-1/2" Kelly valve to 3000psi for 10min, Blind rams & HCR valve tested to 3100psi for 10 min, Annular tested to 1550psi held for 10min, Liner manifold & kill line tested to 3150psi held for 10mn, Tested pipe rams to 3150psi held 10 min, 7" casing tested to 1500psi held for 10min.
		We had to replace pipe rams to get good test they were replaced and tested good.
Report Start Date 6/29/2013	Report End Date 6/30/2013	Operations Summary Finish testing BOPE & 7" casing, TIH w/3-1/2" DP and 6-1/8 BHA. Drill cement & float equipment, drill 6-18" hole section F/5389' T/5622'. Circulate condition hole with 8.9 lb produced water.
Dur (hrs)		Comment
		5.00 JSA Pre-Tour meeting, TIH W/6-1/8" bit plus mud motor & 3-1/2" DP W/ 3-1/2" HWDP, DV tool is set @ 2515' we tagged @ 2504' we had 11' of cement to drill.



## Daily Activity Report

Well Name: E317X Aneth Unit

API Number 49037500540000	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Well Spud Date/Time 6/16/2013 13:30	Rig Release Date/Time 7/5/2013 06:00	

Dur (hrs)	Comment	
2.00	Drilling 11' of cement in 7" casing F/2504' T/2515' good returns, Drill DV tool F/2515' T/2516' good returns. Drilled DV tool with 6-1/8"PDC bit mud motor 3-1/2" DP & 3-1/2" HWDP drilled very good W/ no issues.	
3.00	JSA Pre-Tour meeting, TOO H noticed that DP connection was leaking after drilling the DV tool, pulled three joints they were also leaking, So made de sion to TOO H to re-torque drill string,	
5.00	JSA Pre-Tour meeting, TIH with 6-1/8" BHA W/ mud motor & 3-1/2 DP also 3-1/2" HWDP, Float shoe is set @ 5388' we tagged @ 5336' so we had 52' of cement to drill.	
1.00	Drill Cement in 7" casing F/5336' T/5387' Drilled Float shoe F/5387' T/5388' W/ 6-1/8" PDC Bit mud motor, 3-1/2" DP & 3-1/2" HWDP Drilled very good, Good returns.	
6.50	JSA Pre-Tour Meeting about all the potential problems we might see in this hole section, Everyone had a job to do if we seen and issues.  Proceeded to Drill 6-1/8" hole section F/5389' T/5622' W/6-1/8" PDC bit Mud Motor, 3-1/2" DP, 3-1/2" HWP & 8.9 lb produced water with lime for and H2s encounters.. This hole section drilled very good with no issues, no torque no major gas issues. We had great returns & good samples for geologist. Geologist decided to drill 10' deeper than original TD. We ran Polymer sweeps to clean hole W/ good results.  Samples: were Dolomite, Black Shale, Some salt, had good samples.	
1.50	Circulate and condition 6-1/8" hole section, W/ 8.9lb produced water, good circulation we are seeing 1/4" cutting,	
Report Start Date 6/30/2013	Report End Date 7/1/2013	Operations Summary Circulate/condition hole, TOO H, set wireline RBP @ 5338', ND top off hole with 8.9 lb produced water. Install night cap on wellhead. Start to ND rig.
Dur (hrs)	Comment	
1.00	Circulate condition hole with 8.9lb produced water.	
4.50	JSA Pre-Tour meeting, TOO H W/ 6-1/8" BHA, & 3-1/2" DP, Standing back 5100' to e proactive in case we have gas migrate up hole,	
2.00	JSA Pre-Tour meeting W/ Blue Jet and Rig Crew, R/U and ran 7" Baker Hughes Wireline RBP RBP in hole set @ 5338' RBP ran in hole with no issues and set properly.  If any information on RBP is needed please contact @ (505) 326-0216	
7.50	JSA Pre-Tour meeting, TOO H with 3-1/2" DP laying down.	
3.00	JSA Pre-Tour meeting, N/D BOPE, top off hole with 8.9lb produced water. Install wellhead night cap.  Hole has 214.5 BBLS of produced water.	
6.00	JSA Pre-Tour meeting, R/D manifold, hard lines to pits, R/D the rig floor Kelly Air tugger, R/D all hoses to pumps and tanks.	
Report Start Date 7/1/2013	Report End Date 7/2/2013	Operations Summary Rigging down all equipment, Clean equipment and location. Waiting on orders
Dur (hrs)	Comment	
12.00	JSA Pre-Tour meeting, Rigging down loading trailers for rig move,	
12.00	JSA Pre-Tour meeting, Service rig, Clean equipment and location.	
Report Start Date 7/2/2013	Report End Date 7/3/2013	Operations Summary Rigging down all equipment, Clean equipment and location. Haul all undeeded water Waiting on orders
Dur (hrs)	Comment	
24.00	JSA Pre-Tour meeting rig, service, clean rig, haul water off location.	
Report Start Date 7/3/2013	Report End Date 7/4/2013	Operations Summary Stand by, wait on location, Change liners in both pumps.
Dur (hrs)	Comment	
24.00	Stand by, wait on location, Change liners in both pumps.	
Report Start Date 7/4/2013	Report End Date 7/5/2013	Operations Summary Stand by, wait on location, Rig released @ 06:00 on 7-5-13 to RU 29-33H
Dur (hrs)	Comment	
24.00	Stand by, wait on location, Rig released @ 06:00 on 7-5-13 to RU 29-33H	
Report Start Date 7/8/2013	Report End Date 7/8/2013	Operations Summary Moved rig onto location, filled out jsa, tailgate meeting on hand protection. Set rig pad, spot in rig. RUWSU, waited on rig equipment. No psi on well, RU pump & pit to well. Removed 5K B1 flange, NU BOP/hydri. RU floor & tongs, spot in trailer w/ workstring. PU one jt w/ test pkr & set 30' in the hole. Load & test BOP/hydri 200# low - 1000# high, tested good. Pull & LD pkr, tally tbg on trailer. TIH w/ Baker Hughes retrieving tool & PU 157 jts. Tagged up and latched onto RBP 10' in w/ jt 157 @ 5137' (200' high, then it was recommended @ 5338'). Installed TIW, released RBP, no pressure on well. Lowed jt 157 to rig floor. SIW, secured tbg on trailer, PU tools, SDFD.
Dur (hrs)	Comment	
1.00	Travel time	
1.00	Checked out rig, rode rig to location,	
0.75	Filled out jsa, tailgate meeting,	
0.75	Backhoe work,	



## Daily Activity Report

Well Name: E317X Aneth Unit

API Number 49037500540000	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Well Spud Date/Time 6/16/2013 13:30	Rig Release Date/Time 7/5/2013 06:00	

Dur (hrs)	Comment
1.50	Set rig pad, spot in rig, RUWSU,
0.75	Waited on rig equipments,
0.50	No pressure on well, RU pump & pit to well,
1.75	Removed 5K B1 flange, NU bop's, RU floor & tongs,
0.75	Spot in tbg trailer, p/u one jt w/ test pkr, set pkr, test bop's, pulled & LD pkr,
3.25	Tally tbg, p/u & tih w/ retrieving tool & 165 jts,
0.50	SIW, secured tbg on trailer, p/u tools, SDFD.
1.00	Travel time

Report Start Date 7/9/2013	Report End Date 7/9/2013	Operations Summary Filled out jsa, tailgate meeting, no pressure on well. Pull first jt, tbg was standing full. LD jt 157, RU hose & pumped down through tbg. RD hose, TOH w/ 156 jts. LD Baker Hughes RBP, REC rep Phillip B was on location for line locate, had MWS rsbt crew dig an earth pit (line & fence pit). Made a 6-1/8" bit, bit sub. TIH w/ 156 jts from derrick, PU 9 jts, tagged up fill w/ jt 165 @ 5396'. LD jt 165, spot in & RU N2 Unit. RU swivel w/ jt 165 and a string float. Held short safety meeting w/ 8 people on location on communication/high pressure lines. Waiting on frac tank for 45 mins. RU hard lines to frac tank, started up N2, test lines 500# low - 2000# high, tested good. Started unloading N2 to est circ. About 45 mins into job, a fitting on stand pipe got washed out and had to SD N2 Unit. SI TIW valve, bled off lines, down for 2 hrs 45 mins to replace fitting. Hooked lines back up, started up N2 unit. Load & test lines 500# low - 2000# high, tested good. Started unloading & est circ in 30 mins. CO w/ N2 Unit from 5396' - 5495' w/ jts 165, 166, 167. Circ hole for 45 mins. SD N2 Unit, hung swivel back in derrick. LD 3 jts (EOT @ 5394'), SIW, secured tbg on trailer, PU tools, SDFN.
-------------------------------	-----------------------------	--

Dur (hrs)	Comment
1.00	Travel time
0.50	Filled out jsa, tailgate meeting,
0.50	No pressure on well, open up bop's,
2.50	Pull first jt, tbg standing full, LD 1 jt, pumped down threw tbg, TOH w/ tbg & ld pkr,
0.50	Had MWS on location to dig an earth pit,
1.50	MU 6-1/8" bit, x-over, tih w/ 156 jts from derrick, p/u 9 jts, tag up,
1.00	Spot in & RU N2 Unit, RU swivel w/ jt 165 w/ string float,
0.75	Waiting on frac tank,
1.50	RU hard lines to frac tank, start up N2 & unload to est circ, fitting washed out on syand pipe, SD unit,
2.75	Worked on replacing fitting,
2.50	Kick on N2 unit, test lines, started unloading to est circ, c/o hole,
0.50	SIW, secured tbg on trailer, p/u tools, SDFD.
1.00	Travel time

Report Start Date 7/10/2013	Report End Date 7/10/2013	Operations Summary Filled out jsa, tailgate meeting, open up well, PU 7 jts tag fill @ 5617.86', CO w/ N2 unit from 5617' to 5624'. Circ hole clean for 1.5 hrs, SD N2 unit, bled off pressure. RD N2 unit & frac tank, RD swivel. EOT was at 5621', pulled up on tbg & was stuck. Pulled 15 to 20K over & jarred tbg loose. Notified Craig W, LD 7 jts w/ string float. TOH w/ 80 jts, pumped 135 bbls of FW. TOH w/ 84 jts, load csg w/ a total of 215 bbl, spot in & RU Blue Jet. RIH w/ CCL & Bond log tool, ran logs from 5389' to surface. RDMO WL. TIH w/ 40 jts for kill string, SIW, SDFD.
--------------------------------	------------------------------	--

Dur (hrs)	Comment
1.00	Travel time
0.50	Filled out jsa, tailgate meeting,
0.25	Check well psi, bled off to rig pit, open up bop's,
0.25	P/U 7 jts, tag up fill, ld jt 171,
0.50	Swivel up w/ jt 171,
2.75	C/O to TD w/ N2 Unit,
0.50	RD swivel w/ jt 172,
1.25	POH & LD 7 jts, TOH w/ 80 jts,
0.50	Pumped down 135 bbls f/w,
0.75	TOH w/ 84 jts
0.75	Load hole with f/w, spot in & RU Blue Jet, held safety mtng,
1.50	RIH w/ WL to log well, RDMO WL,
0.50	TIH w/ kill string,
0.50	SIW, secured tbg on trailer, p/u tools, SDFD.
1.00	Travel time

Report Start Date 7/11/2013	Report End Date 7/11/2013	Operations Summary TOH w/ kill string, held safety meeting w/ WL & Rig Crew, load hole w/ 15 bbl of f/w, spot in & RU Weatherford WL, RIH with tool, tag @ 5597', notified Craig W, said it be ok to log from there, logged from 5600' - 5200', sent logs to engineers, said it was all good, poh & RDMO WL, moved out N2 unit, TIH w/ 1jt tailpipe, treating pkr, 1.78"E" profile nipple, 4' sub, sliding sleeve, 163 jts, set pkr, safety meeting w/ 11 people on location, spot in & RU Baker Hughes, pumped 2500 gals of 20% HCL Acid, SWI, RDMO Baker Hughes, secured tbg on trailer, p/u tools, SDFD.
--------------------------------	------------------------------	--



## Daily Activity Report

Well Name: E317X Aneth Unit

API Number 49037500540000	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Well Spud Date/Time 6/16/2013 13:30	Rig Release Date/Time 7/5/2013 06:00	

Dur (hrs)	Comment
1.00	Travel time
0.50	Filled out jsa, tailgate meeting,
0.25	No psi on well, open up bop's,
0.25	TOH w/ kill string,
1.00	Safety meeting, Spot in & RU WL,
3.00	TIH with tool, log OH, sent logs to engineers, all good, POH w/ line,
0.50	RDMO WL, Installed stripping head, spot in Baker Hughes Acid Trucks,
1.75	MU & TIH w/ one jt tailpipe, treating pkr, 163 jts,
0.25	Safety meeting, RU acid trucks,
3.00	Treat well w/ 2500 gals of 20% acid, flush with f/w, SIW, RDMO Baker Hughes,
0.50	Secured tbg on trailer, p/u tools, SDFD.
1.00	Travel time

Report Start Date 7/12/2013	Report End Date 7/12/2013	Operations Summary RU swabbing tool, made 10 runs, well started flowing & blowing a lot of gas, recovered a total of 205 bbls. RD swabbing tools, SIW, SDFD.
--------------------------------	------------------------------	---

Dur (hrs)	Comment
1.00	Travel time
0.50	Filled out jsa, tailgate meeting,
0.50	Check well psi, open up well,
8.00	RU swabbing tool, swab & flowed back well, RD tools,
0.50	SIW, p/u tools, SDFD.
1.00	Travel time

Report Start Date 7/15/2013	Report End Date 7/15/2013	Operations Summary JSA, hold tailgate safety. 700 psi on tubing, 0 psi on casing. Flow well back to pit. Tubing @ 0 psi. Release pckr. Pump 20 bbl's 10# down tubing, 20 bbl's 10# brine down casing, well dead. Lay down 3 jnt's on float, tooh with 160 jnt's, lay down sliding sleeve, pckr and 1 jnt. Make up AS1x pckr, perf sub. TIH with 161 jnt's, set packer @ 5303'. Pressure test casing, mock mit @ 1000 psi. for 30 min. Good test. Circulate hole pckr fluid. Pressure test casing and pckr @ 1020 psi, 30 min. Good test. Release on/off tool, tooh laying down 91 jnt's. SWI.
--------------------------------	------------------------------	--

Dur (hrs)	Comment
1.00	
0.50	Fill out jsa, hold tailgate safety meeting on eye protection.
0.50	Check well pressure's, 700 psi on tubing, 0 psi on casing.
1.00	Flow well back to pit. Tubing @ 0 psi.
0.50	Release pckr. Pump 20 bbl's 10# down tubing, 20 bbl's 10# brine down casing, well dead.
1.50	Lay down 3 jnt's on float, tooh with 160 jnt's, lay down sliding sleeve, pckr and 1 jnt.
1.50	Make up AS1x pckr, perf sub. TIH with 161 jnt's, add 6' sub, set packer @ 5303'.
1.00	Pressure test casing, mock mit @ 1000 psi. for 30 min. Good test.
2.50	Circulate hole clean with 220 bbl's pckr fluid.
0.50	Pressure test casing and pckr @ 1020 psi, 30 min. Good test.
1.00	Release on/off tool, tooh laying down 91 jnt's.
0.50	SWI.
1.00	

Report Start Date 7/16/2013	Report End Date 7/16/2013	Operations Summary JSA safety meeting. 0 psi on tubing and casing, open to pit. Continue D 70 jnts of workstring. Swap out floats. Count 170 jnts, tally and prep PLS tubing with KC couplings. MU on/off tool. PU 170 jnts, LD 3 bad jnts, 2 jnts would not tighten up properly, 1 jnt had glue sticking out of seal and lining. Total in hole with KB, 1 jnt, 2 subs, 166 jnts @ 5297.47', on/off tool with 1.81 seal nipple @ 5299.99', 7" AS1X packer @ 5308.57', 1.78 profile nipple @ 5309.57', wireline re-entry guide @ 5309.98'. SWI.
--------------------------------	------------------------------	---

Dur (hrs)	Comment
1.00	
0.50	Fill out jsa, hold tailgate safety meeting on guarding floor openings.
0.50	Check well pressure's, 0 psi on tubing and casing, open to pit.
1.50	Continue laying down 70 jnt's of workstring. Swap out floats.
7.50	Count 170 jnt's, tally and prep pls tubing with kc couplings. Make up on/off tool. Pick up 170 jnt's, laying down 3 bad jnt's, 2 jnt's would not tighten up properly, 1 jnt had glue sticking out of seal and lining. Total in hole with KB, 1 jnt, 2 TK subs, 166 jnt's @ 5297.47, on/off tool with 1.81 seal nipple @ 5299.99, 7" AS1x packer @ 5308.57, 1.78 profile nipple @ 5309.57, wire line re-entry guide @ 5309.98'.
0.50	SWI
1.00	



## Daily Activity Report

Well Name: E317X Aneth Unit

API Number 49037500540000	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Well Spud Date/Time 6/16/2013 13:30	Rig Release Date/Time 7/5/2013 06:00	

Report Start Date 7/17/2013	Report End Date 7/17/2013	Operations Summary JSA, safety meeting. 0 psi on tubing and casing, open to pit. MU SS SN on tubing hanger and tubing, tighten to spec's. Land hanger in well head, lock down. Secure well for Resolute rig inspection. Update jsa. RD tongs, hand rails, ladder and floor. ND BOP-hydril, set on rack. PU 5000# tree, install on well head. PT seals @ 2600 psi. PT csg and pkr, mock MIT @ 1030 psi for 30 mins - good test on seal and csg. Spot in and RU Tefteller WL truck. RIH, pressure up tbg @ 1000 psi, puncture disk. RIH and retrieve plug, RD WL truck. MIT with Wilson Services and NNEPA, passed. RD pump and pit. RD PU, pull off location.  MIT. Move in Wilson pressure truck. Hook up chart recorder and gauges, pressure up casing to 1070 psi, at 30 mins dropped to 1060 psi. Passed MIT, witnessed by NNEPA rep Jean Bia.
--------------------------------	------------------------------	---

Dur (hrs)

Comment

- 1.00  
0.50 Fill out jsa, hold tailgate safety meeting on waste management.  
0.50 Check well pressure's, 0 psi on tubing and casing. Open to pit.  
1.00 Make up ss sn on tubing hanger and tubing, tighten to spec's. Land hanger in well head, lock down.  
2.00 Secure well for Resolute rig inspection. Update jsa.  
1.00 Rig down tonds, hand rails, ladder and floor. Nipple down bop-hydril, set on rack.  
0.50 Pick up 5000# tree, install on well head.  
0.50 Pressure test seals @2600 psi. Pressure test casing and pkr, mock mit, @ 1030 psi for 30 min's. Good test on seal and casing.  
1.00 Spot in and rig up Tefteller wl truck. Run in hole, pressure up tubing @ 1000 psi, puncture disk, run in hole and retrieve plug, rig down wl truck.  
1.00 MIT with Wilson Service's and NNEPA, passed.  
1.00 Rig down pump and pit. Rig down pulling unit, pull off Location.  
1.00

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	<b>FORM 9</b>  <b>5.LEASE DESIGNATION AND SERIAL NUMBER:</b> I-149-IND-8635
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b> Navajo
<b>1. TYPE OF WELL</b> Water Injection Well	<b>7.UNIT or CA AGREEMENT NAME:</b> ANETH
<b>2. NAME OF OPERATOR:</b> RESOLUTE NATURAL RESOURCES	<b>8. WELL NAME and NUMBER:</b> Aneth Unit E317X
<b>3. ADDRESS OF OPERATOR:</b> 1675 Boradway Ste 1950 , Denver, CO, 80202	<b>9. API NUMBER:</b> 43037500540000
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1984 FSL 0609 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NWSW Section: 17 Township: 40.0S Range: 24.0E Meridian: S	<b>9. FIELD and POOL or WILDCAT:</b> GREATER ANETH  <b>COUNTY:</b> SAN JUAN  <b>STATE:</b> UTAH
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>	

TYPE OF SUBMISSION	TYPE OF ACTION		
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input checked="" type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <b>7/29/2013</b>			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

**12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.**  
 Resolute completed this well on 7/29/2013 and put it on injection at that time. A completion report has been filed.

**Accepted by the  
 Utah Division of  
 Oil, Gas and Mining  
 FOR RECORD ONLY  
 November 27, 2013**

<b>NAME (PLEASE PRINT)</b> Shery Glass	<b>PHONE NUMBER</b> 303 573-4886	<b>TITLE</b> Sr Regulatory Technician
<b>SIGNATURE</b> N/A	<b>DATE</b> 11/27/2013	



31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS: injecting

INTERVAL B (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL C (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

INTERVAL D (As shown in Item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
Upper Ismay	5,251			Chimney Rock Shale Akah	5,582
Lower Ismay	5,345				5,606
Gothic Shale	5,406				
Desert Creek IA	5,423				
Desert Creek IB	5,438				
Desert Creek IC	5,445				
Desert Creek IIA	5,457				
Desert Creek IIB	5,478				
Desert Creek IIC	5,493				
Desert Creek III	5,553				

35. ADDITIONAL REMARKS (include plugging procedure)

Well is offset to AU E-317, began injecting 7-29-13, enhancing area production. Summary of operations attached.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Sherry Glass TITLE Sr Regulatory Technician  
 SIGNATURE *Sherry Glass* DATE 11/27/2013 CORR 2-7-14

This report must be submitted within 30 days of

- completing or plugging a new well
- reentering a previously plugged and abandoned well
- drilling horizontal laterals from an existing well bore
- significantly deepening an existing well bore below the previous bottom-hole depth
- recompleting to a different producing formation
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

\* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

\*\* ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining  
 1594 West North Temple, Suite 1210  
 Box 145801  
 Salt Lake City, Utah 84114-5801

Phone: 801-538-5340  
 Fax: 801-359-3940



Daily Activity Summary

Well Name: E317X Aneth Unit

API Number 4303750054		Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50		KB-Casing Flange Distance (ft) 16.50		Regulatory Spud Date 6/16/2013 13:30	Rig Release Date/Time 7/27/2013 06:00
Job Category Drilling & Completion			Primary Job Type Drilling & Completion Original			Secondary Job Type	
Start Date 6/15/2013			End Date 9/4/2013			Total AFE Amount (Cost)	

Objective  
Drill and complete an injector well. Two strings of casing will be set in the well, with 7" intermediate set in the upper Ismay. Mud logger and OH logs will be run.

Contractor D&J	Rig Number 1	Rig on Report Date 6/15/2013	Rig off report date 7/5/2013
Contractor Four Corners Well Service	Rig Number 6	Rig on Report Date 7/8/2013	Rig off report date

Report Number	Start Date	End Date	Summary
1	5/28/2013	5/28/2013	Break up cement pad, load and haul off cement, hauled equipment to location
2	5/29/2013	5/29/2013	Load and haul cement and back fill
3	5/30/2013	5/30/2013	Build and widen location for rig
4	6/10/2013	6/10/2013	Dig up wellhead, dig for cellar, set and fit box
5	6/12/2013	6/12/2013	Pre fab 16" for conductor casing for new well
6	6/13/2013	6/13/2013	Weld 3 joints of 16" conductor casing
7	6/14/2013	6/14/2013	Set conductor casing.
8	6/15/2013	6/16/2013	Safety meeting w/ rig crew. Dawn Trucking loaded equipment and road to new location. Spot equipment, RU derrick in the air @ 11:00 am. Continue RU well flange on conductor pipe. Cut and weld flange on flow line, NU mud cross, hydrill, diverter, flowline, NU choke to flex hose.
9	6/16/2013	6/17/2013	safety meeting w/rig crew, run hard line to lay down tank, Drlg rat and mouse hole, P/U surface BHA, Tag cement @ 95', Drlg surface hole f/95'- t/660', Surveys at 70' - 1", 336' - 1", 549' - 3/4 "
10	6/17/2013	6/18/2013	Drlg surface hole f/660'- t/1434', Surveys at 741' - 3/4", 928' - 1", 1240' - 3/4 ", 1394' - 1/2 ", Circulate, Survey, Flow check, Circulate.  Note; water flow encountered at 1384', Flow check at TD well making 42bbls/hr, Flow check after circulating at reduced rate 1 bbl/hr, We will spot a 80 bbl pill of mud on bottom from bulk plant.
11	6/18/2013	6/19/2013	Circulate and condition mud, Well flowing 14bbls/hr, Mix and spot 60 bbl pill @ 10.1 MW on bottom. Flow check, Well flowing @ 14 bbls/hr. POOH, ND rotating head and flowline. Test all H2S equipment with ABC fire and safety. Run 34 jts 9 5/8" 36#, J55 set at 1430'. Circulate, cement surface casing. No cement returns to surface, WOC, Perform top out cement job, 5 bbls returns to surface, RD cement top out line, Check cement top, Cement fell back to 55', WOC  Note; Halliburton sent truck to town for more top out cement, Will perform top out when truck returns.
12	6/19/2013	6/20/2013	WOC, Cement fell back to 75', L/D cement head, P/U annular, Rough cut conductor casing, Top out cement as follows, Pump .5 bbls FW, Pump 13 bbls top out cement @ 15.8 ppg, Yield 1.15 , 4bbls cement to surface, Calculated cement top @ 145', N/D down annular, Weld on Wellhead, NU 11" BOPE, R/U gas buster, Pressure test BOPE equipment, Continue R/U gas buster.
13	6/20/2013	6/21/2013	Pressure test BOPE, Cut 120' drlg line, R/U hard lines to LD tank, P/U directional BHA, Drl shoe track, FIT, Drlg intermediate hole section from 1434' - t/2012'
14	6/21/2013	6/22/2013	Drlg F/2012' - T/2670. Change out catch tank, drlg F/2670' - T/2899'.
15	6/22/2013	6/23/2013	Drlg intermediate hole section F/2899' - T/3457'.
16	6/23/2013	6/24/2013	Drlg F/3457' - T/3600', Condition and circulate mud, drlg F/3600' - T/3709', condition and circulate mud. TOOH for bit #2, LD motor, PU new motor and bit. TIH tag at 2460', wash and ream through bridge. TIH tag @ 3660' - 49' fill. Wash and ream to bottom, drill F/3709' - T/3733'.
17	6/24/2013	6/25/2013	Drill intermediate hole F/3733' - T/4769'
18	6/25/2013	6/26/2013	Drlg F/4769', T/4840' - ROP 35'/hr. Rig Service, drlg F/4840', T/5087' - ROP 45'/hr. Change out cutting bin. Drlg F/5087', T/5389' - ROP 46'/hr. TD @ 5389' on 6-25-13 @ 23:30. Circulate pump sweeps, POOH F/5389' - T/4226'. PU kelly, wash and ream through tight spot @ 4226'. Pump high vis sweep. Set back kelly. Continue POOH F/4226' - T/729.51'.
19	6/26/2013	6/27/2013	TOOH, run open-hole log with Weatherford. TIH with cone bit, bring mud wt up to 10.3. Circulate, rotate and clean up 21' of fill. TOOH 20 stands, circulate condition hole. TIH with 20 stands, no fill. Rotate, circulate and condition hole. TOOH LD 4-1/2" drill pipe and BHA. RU casing crew to run 7" casing.
20	6/27/2013	6/28/2013	Safety meeting with all personnel on location. Running 7" casing, cement 7" casing w/ full returns to surface. NU 11" 3M BOPE.
21	6/28/2013	6/29/2013	Rig up flow lines from BOPE and gas buster. TIH with 3-1/2" DP and 6-1/8 BHA to top of DV tool @ 2513'. Clean mud pits, pressure testing BOPE and 7" casing.
22	6/29/2013	6/30/2013	Finish testing BOPE & 7" casing, TIH w/3-1/2" DP and 6-1/8 BHA. Drill cement & float equipment, drill 6-18" hole section F/5389' T/5622'. Circulate condition hole with 8.9 lb produced water.
23	6/30/2013	7/1/2013	Circulate/condition hole, TOOH, set wireline RBP @ 5338', ND top off hole with 8.9 lb produced water. Install night cap on wellhead. Start to ND rig.



Daily Activity Summary

Well Name: E317X Aneth Unit

API Number 4303750054		Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90		Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Regulatory Spud Date 6/16/2013 13:30	Rig Release Date/Time 7/27/2013 06:00	
Report Number	Start Date	End Date	Summary				
24	7/1/2013	7/2/2013	Rigging down all equipment, Clean equipment and location. Waiting on orders				
25	7/2/2013	7/3/2013	Rigging down all equipment, Clean equipment and location. Haul all undeeded water Waiting on orders				
26	7/3/2013	7/4/2013	Stand by, wait on location, Change liners in both pumps.				
27	7/4/2013	7/5/2013	Stand by, wait on location, Rig released @ 06:00 on 7-5-13 to RU 29-33H				
28	7/8/2013	7/8/2013	Moved rig onto location, filled out jsa, tailgate meeting on hand protection. Set rig pad, spot in rig. RUWSU, waited on rig equipment. No psi on well, RU pump & pit to well. Removed 5K B1 flange, NU BOP/hydrl. RU floor & tongs, spot in trailer w/ workstring. PU one jt w/ test pkr & set 30' in the hole. Load & test BOP/hydrl 200# low - 1000# high, tested good. Pull & LD pkr, tally tbg on trailer. TIH w/ Baker Hughes retrieving tool & PU 157 jts. Tagged up and latched onto RBP 10' in w/ jt 157 @ 5137' (200' high, then it was recommended @ 5338'). Installed TIW, released RBP, no pressure on well. Lowed jt 157 to rig floor. SIW, secured tbg on trailer, PU tools, SDFD.				
29	7/9/2013	7/9/2013	Filled out jsa, tailgate meeting, no pressure on well. Pull first jt, tbg was standing full. LD jt 157, RU hose & pumped down through tbg. RD hose, TOH w/ 156 jts. LD Baker Hughes RBP, REC rep Phillip B was on location for line locate, had MWS rsbt crew dig an earth pit (line & fence pit). Made a 6-1/8" bit, bit sub. TIH w/ 156 jts from derrick, PU 9 jts, tagged up fill w/ jt 165 @ 5396'. LD jt 165, spot in & RU N2 Unit. RU swivel w/ jt 165 and a string float. Held short safety meeting w/ 8 people on location on communication/high pressure lines. Waiting on frac tank for 45 mins. RU hard lines to frac tank, started up N2, test lines 500# low - 2000# high, tested good. Started unloading N2 to est circ. About 45 mins into job, a fitting on stand pipe got washed out and had to SD N2 Unit. SI TIW valve, bled off lines, down for 2 hrs 45 mins to replace fitting. Hooked lines back up, started up N2 unit. Load & test lines 500# low - 2000# high, tested good. Started unloading & est circ in 30 mins. CO w/ N2 Unit from 5396' - 5495' w/ jts 165, 166, 167. Circ hole for 45 mins. SD N2 Unit, hung swivel back in derrick. LD 3 jts (EOT @ 5394'), SIW, secured tbg on trailer, PU tools, SDFN.				
30	7/10/2013	7/10/2013	Filled out jsa, tailgate meeting, open up well, PU 7 jts tag fill @ 5617.86', CO w/ N2 unit from 5617' to 5624'. Circ hole clean for 1.5 hrs, SD N2 unit, bled off pressure. RD N2 unit & frac tank, RD swivel. EOT was at 5621', pulled up on tbg & was stuck. Pulled 15 to 20K over & jarred tbg loose. Notified Craig W, LD 7 jts w/ string float. TOH w/ 80 jts, pumped 135 bbls of FW. TOH w/ 84 jts, load csg w/ a total of 215 bbl, spot in & RU Blue Jet. RIH w/ CCL & Bond log tool, ran logs from 5389' to surface. RDMO WL. TIH w/ 40 jts for kill string, SIW, SDFD.				
31	7/11/2013	7/11/2013	TOH w/ kill string, held safety meeting w/ WL & Rig Crew, load hole w/ 15 bbl of f/w, spot in & RU Weatherford WL, RIH with tool, tag @ 5597', notified Craig W, said it be ok to log from there, logged from 5600' - 5200', sent logs to engineers, said it was all good, poh & RDMO WL, moved out N2 unit, TIH w/ 1jt tailpipe, treating pkr, 1.78" F" profile nipple, 4' sub, sliding sleeve, 163 jts, set pkr, safety meeting w/ 11 people on location, spot in & RU Baker Hughes, pumped 2500 gals of 20% HCL Acid, SWI, RDMO Baker Hughes, secured tbg on trailer, p/u tools, SDFD.				
32	7/12/2013	7/12/2013	RU swabbing tool, made 10 runs, well started flowing & blowing a lot of gas, recovered a total of 205 bbls. RD swabbing tools, SIW, SDFD.				
33	7/15/2013	7/15/2013	JSA, hold tailgate safety. 700 psi on tubing, 0 psi on casing. Flow well back to pit. Tubing @ 0 psi. Release pkr. Pump 20 bbl's 10# down tubing, 20 bbl's 10# brine down casing, well dead. Lay down 3 jnt's on float, tooh with 160 jnt's, lay down sliding sleeve, pkr and 1 jnt. Make up AS1x pkr, perf sub. TIH with 161 jnt's, set packer @ 5303'. Pressure test casing, mock mit @ 1000 psi. for 30 min. Good test. Circulate hole pkr fluid. Pressure test casing and pkr @ 1020 psi, 30 min. Good test. Release on/off tool, tooh laying down 91 jnt's. SWI.				
34	7/16/2013	7/16/2013	JSA safety meeting. 0 psi on tubing and casing, open to pit. Continue D 70 jnts of workstring. Swap out floats. Count 170 jnts, tally and prep PLS tubing with KC couplings. MU on/off tool. PU 170 jnts, LD 3 bad jnts, 2 jnts would not tighten up properly, 1 jnt had glue sticking out of seal and lining. Total in hole with KB, 1 jnt, 2 subs, 166 jnts @ 5297.47', on/off tool with 1.81 seal nipple @ 5299.99', 7" AS1X packer @ 5308.57', 1.78 profile nipple @ 5309.57', wireline re-entry guide @ 5309.98'. SWI.				
35	7/17/2013	7/17/2013	JSA, safety meeting. 0 psi on tubing and casing, open to pit. MU SS SN on tubing hanger and tubing, tighten to spec's. Land hanger in well head, lock down. Secure well for Resolute rig inspection. Update jsa. RD tongs, hand rails, ladder and floor. ND BOP-hydrl, set on rack. PU 5000# tree, install on well head. PT seals @ 2600 psi. PT csg and pkr, mock MIT @ 1030 psi for 30 mins - good test on seal and csg. Spot in and RU Tefeller WL truck. RIH, pressure up tbg @ 1000 psi, puncture disk. RIH and retrieve plug, RD WL truck. MIT with Wilson Services and NNEPA, passed. RD pump and pit. RD PU, pull off location.  MIT. Move in Wilson pressure truck. Hook up chart recorder and gauges, pressure up casing to 1070 psi, at 30 mins dropped to 1060 psi. Passed MIT, witnessed by NNEPA rep Jean Bia.				
36	7/18/2013	7/18/2013					
37	7/26/2013	7/26/2013	SITP 975 psig. SICIP 0 psig. RUWLU. RIH w/ BHP t/s. Stops @ 0', 2,000', 4,000', 5,000', & 5,500'. Leave t/s in middle of open hole. Tst for 72 hrs.				
38	7/26/2013	7/27/2013					
39	7/29/2013	7/29/2013	POOH w/BHP t/s. Let equalize for 10 min. Remove t/s. RDMO WLU. Notify Prod that well is ready to put on line.				



Daily Activity Summary

Well Name: E317X Aneth Unit

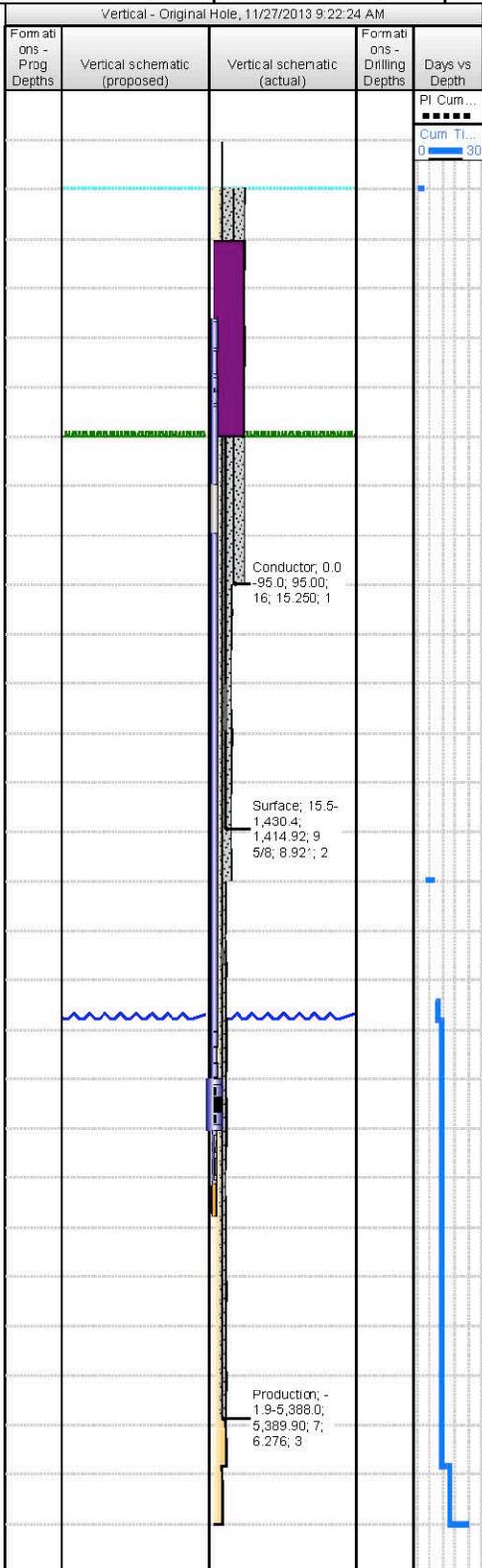
API Number 4303750054		Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Regulatory Spud Date 6/16/2013 13:30	Rig Release Date/Time 7/27/2013 06:00		
Report Number	Start Date	End Date	Summary				
40	8/8/2013	8/8/2013	Clean out Frac Tank #				
41	8/9/2013	8/9/2013	Finish cleaning frac tank so can be returned to Rain for Rent				
42	9/3/2013	9/3/2013	Vac Truck empth out Frac tank hauled to D6				
43	9/4/2013	9/4/2013	Empty frac tanks left on location.				
44	9/26/2013	9/26/2013	Lay over, clean & back haul 2 frac tanks to Dawn trucking yard				



Casing, Liner and Cement report

Well Name: E317X Aneth Unit

API Number 4303750054	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Regulatory Spud Date 6/16/2013 13:30	Rig Release Date/Time 7/27/2013 06:00	



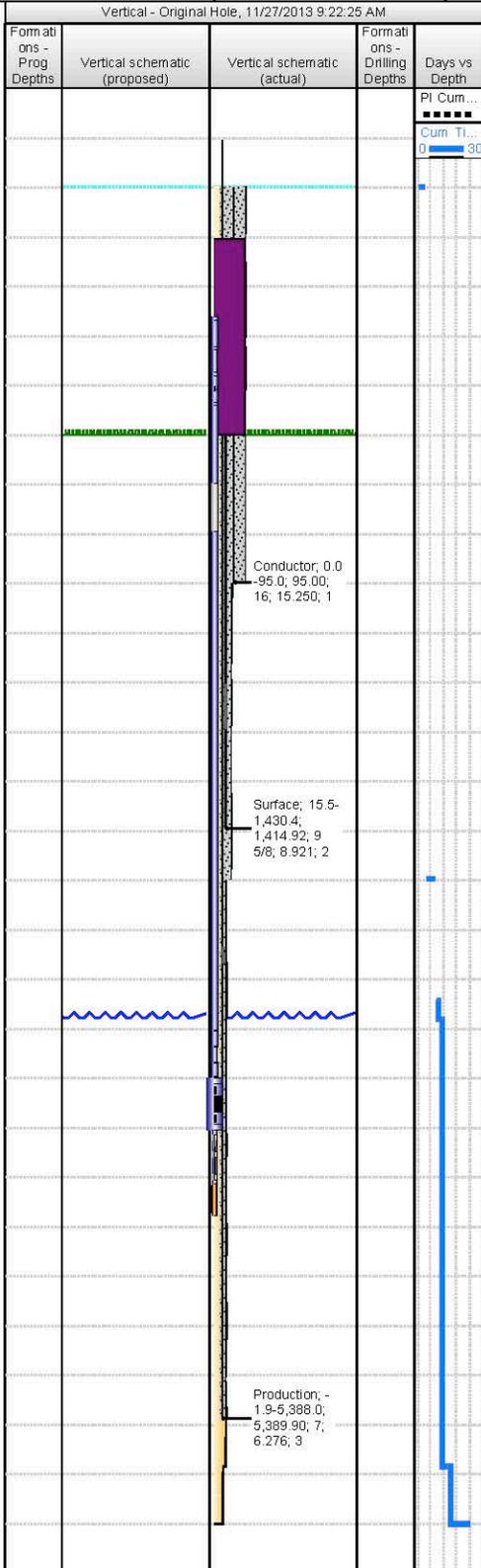
<b>Wellbore</b>			
Wellbore Name <b>Original Hole</b>	Profile Type <b>Vertical</b>	Kick Off Depth (ftKB)	Vertical Section Direction (°)
Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
Conductor	24	0.0	95.0
Surface	12 1/4	95.0	1,434.0
Production	8 3/4	1,434.0	5,389.0
Openhole	6 1/8	5,389.0	5,622.0
<b>Wellhead</b>			
Type 11" x 3000, C22 bowl			
Des	Make	Model	SN
WP Top (psi)			
Type 11" x 3000, T00			
Des	Make	Model	SN
WP Top (psi)			
<b>Mud Checks</b>			
Date	Type	Depth (ftKB)	Dens (lb/gal)
			Vis (s/qt)
			Gel (10s) (lb/100ft²)
			Gel (10m) (lb/100ft²)
			PV OR (Pa·s)
			YP OR (lb/100ft²)
<b>Casing</b>			
Casing Description <b>Conductor</b>		Run Date/Time 6/14/2013 00:00	Set Depth (ftKB) 95.0
Wellbore <b>Original Hole</b>		Scratchers	
Jts	Item Des	OD (in)	Wt (lb/ft)
3	Casing Joints	16	65.00
			Grade H-40
			Len (ft) 95.00
			Top (ftKB) 0.0
			Btm (ftKB) 95.0
<b>Cement: Conductor Cement</b>			
Cementing Start Date 6/14/2013		Cementing End Date 6/14/2013	
Wellbore <b>Original Hole</b>		Evaluation Method <b>Returns to Surface</b>	
Cement Evaluation Results		Comment	
<b>Cement Stage: Conductor Cement</b>			
Top Depth (ftKB) 0.0	Bottom Depth (ftKB) 95.0	Full Return?	Vol Ceme...
Top Plug?	Bottom Plug?		
Q Pump Init (bbl/min)	Q Pump Final (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)
Plug Bump Pressure (psi)			
Pipe Reciprocated?	Stroke (ft)	Reciprocation Rate (spm)	Pipe Rotated?
Pipe RPM (rpm)			
Tagged Depth (ftKB)	Tag Method	Depth Plug Drilled Out...	Drill Out Diameter (in)
Drill Out Date/Time			
<b>Cement Fluid: &lt;Description?&gt;</b>			
Fluid Type	Fluid Description	Amount (s... Class	Volume Pumped (bbl)
Estimated Top (ftKB)	Est Btm (ftKB)	Yield (ft³/sack)	Mix H2O Ratio (gal/sack)
Free Water (%)			
Density (lb/gal)	Plastic Viscosity (Pa·s)	Thickening Time (hr)	1st Compressive Strength (psi)
<b>Cement Fluid Additives</b>			
Add	Type	Conc	



Casing, Liner and Cement report

Well Name: E317X Aneth Unit

API Number 4303750054	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Regulatory Spud Date 6/16/2013 13:30	Rig Release Date/Time 7/27/2013 06:00	



Wellbore									
Wellbore Name Original Hole		Profile Type Vertical		Kick Off Depth (ftKB)		Vertical Section Direction (°)			
Section Des		Size (in)		Act Top (ftKB)		Act Btm (ftKB)			
Conductor		24		0.0		95.0			
Surface		12 1/4		95.0		1,434.0			
Production		8 3/4		1,434.0		5,389.0			
Openhole		6 1/8		5,389.0		5,622.0			
Wellhead									
Type 11" x 3000, C22 bowl									
Des		Make		Model		SN		WP Top (psi)	
Type 11" x 3000, T00									
Des		Make		Model		SN		WP Top (psi)	
Mud Checks									
Date	Type	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	Gel (10s) (lb/100ft²)	Gel (10m) (lb/100ft²)	PV OR (Pa·s)	YP OR (lb/100ft²)	
6/16/2013	Water Base	95.0	8.40	27	0.000	0.000			
6/17/2013	Fresh Water	822.0	8.60	27			1.0	1.000	
6/18/2013	Fresh Water	1,434.0	8.50	28			1.0	1.000	
Casing									
Casing Description Surface			Run Date/Time 6/18/2013 17:00		Set Depth (ftKB) 1,430.4		Wellbore Original Hole		
Centralizers 12					Scratchers				
Jts	Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)		
33	Casing Joints	9 5/8	36.00	J-55	1,370.37	15.5	1,385.9		
1	Float Collar	9 5/8	36.00	J-55	0.94	1,385.9	1,386.8		
1	Casing Joints	9 5/8	36.00	J-55	42.20	1,386.8	1,429.0		
1	Guide Shoe	9 5/8	36.00	J-55	1.41	1,429.0	1,430.4		
Cement: Surface Casing Cement									
Cementing Start Date 6/18/2013			Cementing End Date 6/18/2013			Wellbore Original Hole			
Evaluation Method Returns to Surface			Cement Evaluation Results No cement returns to surface						
Comment									
Cement Stage: Surface Casing Cement									
Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol Ceme...	Top Plug?	Bottom Plug?				
0.0	1,434.0	No	0.0	Yes					
Q Pump Init (bbl/min)	Q Pump Final (bbl/min)	Avg Pump Rate (bbl/min)		Final Pump Pressure (psi)	Plug Bump Pressure (psi)				
6	0	6		340.0	1,050.0				
Pipe Reciprocated?	Stroke (ft)	Reciprocation Rate (spm)		Pipe Rotated?	Pipe RPM (rpm)				
Tagged Depth (ftKB)	Tag Method	Depth Plug Drilled Out...		Drill Out Diameter (in)	Drill Out Date/Time				
1,375.0	Drill Bit	1,434.0		8 3/4	6/20/2013				
Cement Fluid: Surface Casing Cement									
Fluid Type Lead	Fluid Description			Amount (s...)	Class Howco Lite	Volume Pumped (bbl) 136.0			
Estimated Top (ftKB)	Est Btm (ftKB)	Yield (ft³/sack)	Mix H2O Ratio (gal/sack)	Free Water (%)					
0.0	1,133.0	1.97	10.17						
Density (lb/gal)	Plastic Viscosity (Pa·s)		Thickening Time (hr)		1st Compressive Strength (psi)				
15.80									
Cement Fluid Additives									
Add	Type			Conc					
Bentonite									
Cement Fluid: Surface Casing Cement									
Fluid Type Tail	Fluid Description			Amount (s...)	Class G	Volume Pumped (bbl) 20.0			
Estimated Top (ftKB)	Est Btm (ftKB)	Yield (ft³/sack)	Mix H2O Ratio (gal/sack)	Free Water (%)					
1,133.0	1,434.0	1.97	4.97						
Density (lb/gal)	Plastic Viscosity (Pa·s)		Thickening Time (hr)		1st Compressive Strength (psi)				
15.80									

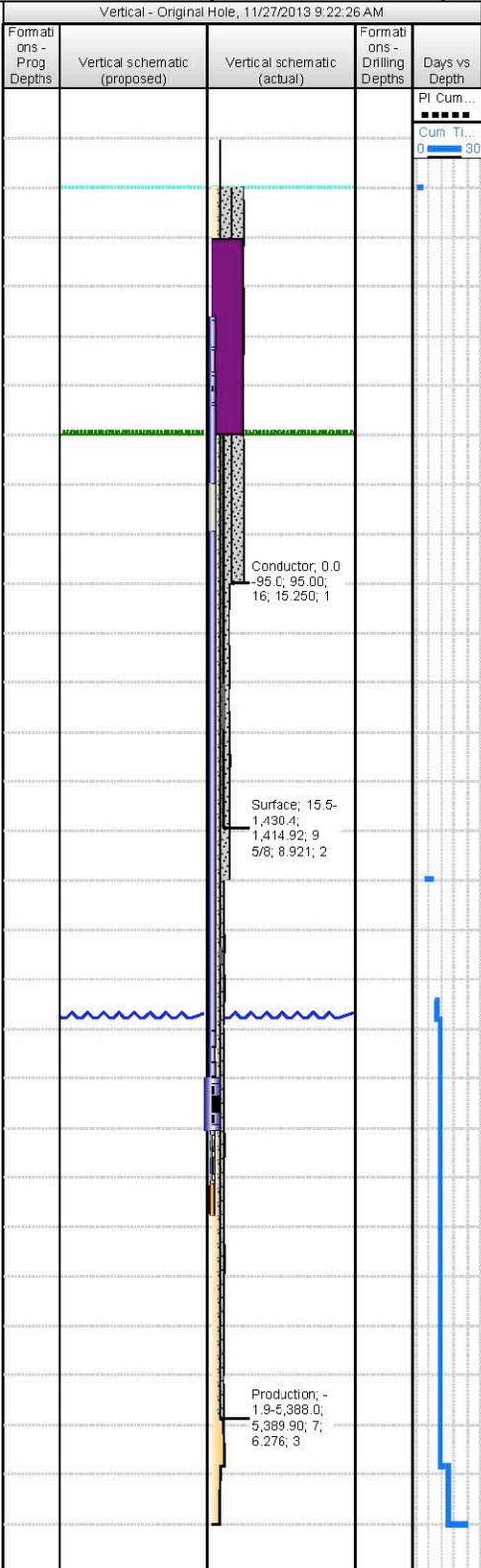




Casing, Liner and Cement report

Well Name: E317X Aneth Unit

API Number 4303750054	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Regulatory Spud Date 6/16/2013 13:30	Rig Release Date/Time 7/27/2013 06:00	



Wellbore			
Wellbore Name	Profile Type	Kick Off Depth (ftKB)	Vertical Section Direction (°)
Original Hole	Vertical		
Section Des	Size (in)	Act Top (ftKB)	Act Btm (ftKB)
Conductor	24	0.0	95.0
Surface	12 1/4	95.0	1,434.0
Production	8 3/4	1,434.0	5,389.0
Openhole	6 1/8	5,389.0	5,622.0

Wellhead				
Type				
11" x 3000, C22 bowl				
Des	Make	Model	SN	WP Top (psi)
Type				
11" x 3000, T00				
Des	Make	Model	SN	WP Top (psi)

Mud Checks								
Date	Type	Depth (ftKB)	Dens (lb/gal)	Vis (s/qt)	Gel (10s) (lb/100ft²)	Gel (10m) (lb/100ft²)	PV OR (Pa-s)	YP OR (lb/100ft²)
6/16/2013	Water Base	95.0	8.40	27	0.000	0.000		
6/17/2013	Fresh Water	822.0	8.60	27			1.0	1.000
6/18/2013	Fresh Water	1,434.0	8.50	28			1.0	1.000
6/19/2013	Fresh Water	1,430.0	8.40	27			1.0	1.000
6/20/2013	Gel Base	1,438.0	8.80	30			1.0	4.000
6/21/2013	Gel Base	2,073.0	8.90	43	3.000	5.000	15.0	12.000
6/22/2013	Gel & Water	3,012.0	9.00	41	4.000	7.000	20.0	14.000
6/23/2013	Gel & Water	3,600.0	9.20	53	5.000	8.000	26.0	12.000
6/24/2013	Gel & Water	3,860.0	9.50	48	6.000	9.000	26.0	13.000
6/25/2013	Gel & Water	5,029.0	9.90	48	6.000	9.000	26.0	13.000

Casing							
Casing Description	Run Date/Time	Set Depth (ftKB)	Wellbore				
Production	6/27/2013 13:30	5,388.0	Original Hole				
Centralizers		Scratchers					
33							
Jts	Item Des	OD (in)	Wt (lb/ft)	Grade	Len (ft)	Top (ftKB)	Btm (ftKB)
57	Casing Joints	7	26.00	J-55	2,515.45	-1.9	2,513.6
1	Stage Tool	7	26.00	J-55	3.00	2,513.6	2,516.6
64	Casing Joints	7	26.00	J-55	2,825.25	2,516.6	5,341.8
1	Float Collar	7	26.00	J-55	1.00	5,341.8	5,342.8
1	Casing Joints	7	26.00	J-55	44.20	5,342.8	5,387.0
1	Float Shoe	7	26.00	J-55	1.00	5,387.0	5,388.0

Cement: Production Casing Cement		
Cementing Start Date	Cementing End Date	Wellbore
6/27/2013	6/28/2013	Original Hole
Evaluation Method	Cement Evaluation Results	
Returns to Surface		
Comment		
Returns to surface, 5 bbl returns on first stage. 4 bbl returns on second stage, cement did hold at surface.		

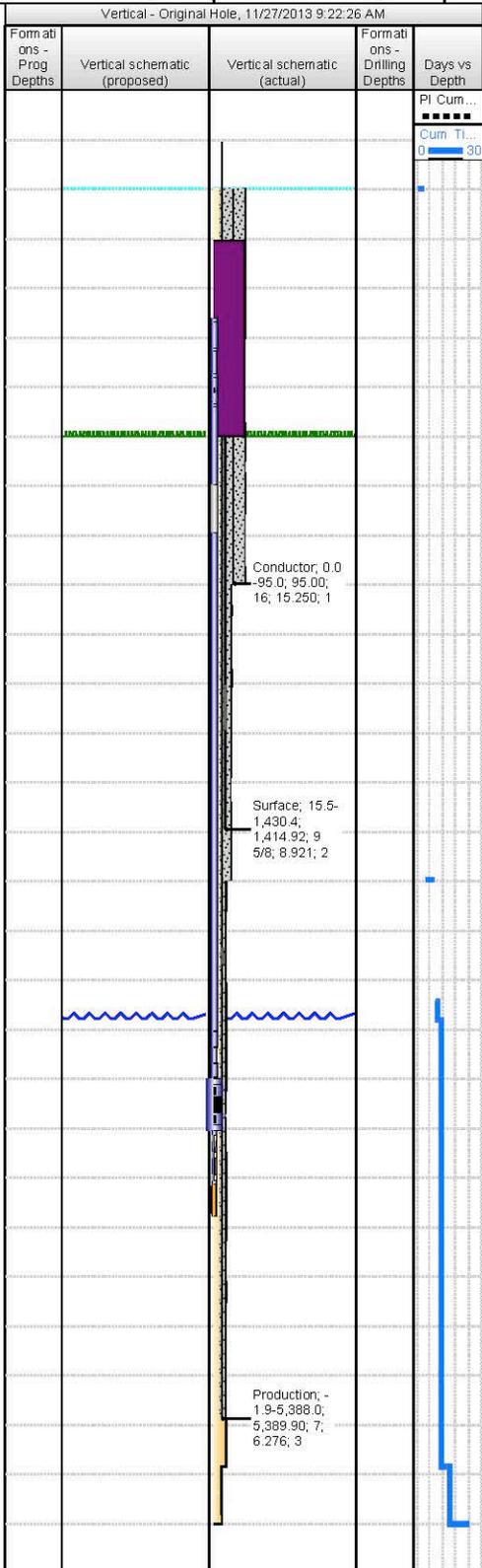
Cement Stage: Production Casing Cement					
Top Depth (ftKB)	Bottom Depth (ftKB)	Full Return?	Vol. Ceme...	Top Plug?	Bottom Plug?
0.0	5,388.0	Yes	8.0		
Q Pump Init (bbl/min)	Q Pump Final (bbl/min)	Avg Pump Rate (bbl/min)	Final Pump Pressure (psi)	Plug Bump Pressure (psi)	
4		4	215.0	600.0	
Pipe Reciprocated?	Stroke (ft)	Reciprocation Rate (spm)	Pipe Rotated?	Pipe RPM (rpm)	
Tagged Depth (ftKB)	Tag Method	Depth Plug Drilled Out...	Drill Out Diameter (in)	Drill Out Date/Time	



Casing, Liner and Cement report

Well Name: E317X Aneth Unit

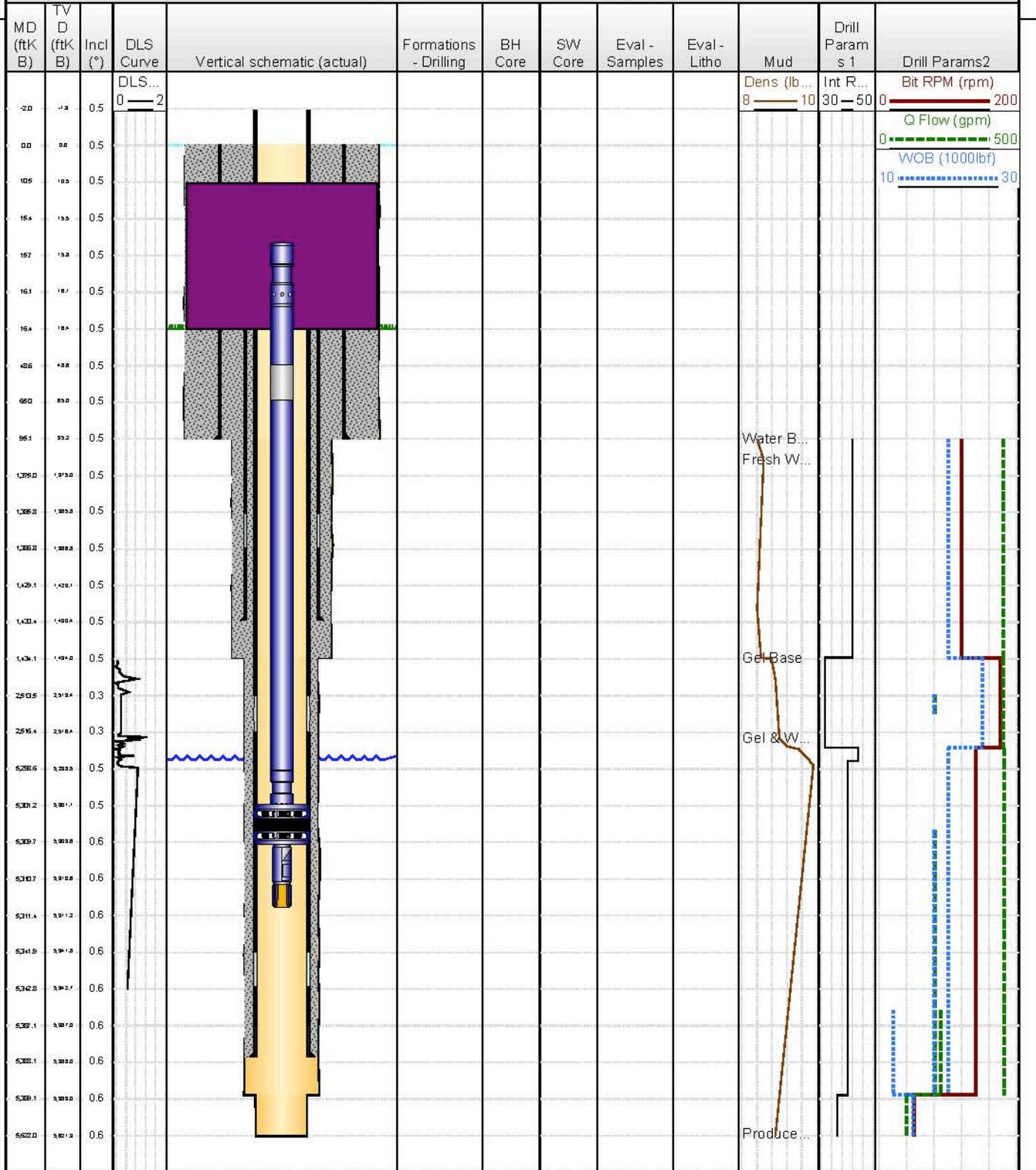
API Number 4303750054	Section 17	Township 40S	Range 24E	Field Name Aneth	County San Juan	State/Province Utah
Ground Elevation (ft) 4,619.90	Casing Flange Elevation (ft) 4,619.90	KB-Ground Distance (ft) 16.50	KB-Casing Flange Distance (ft) 16.50	Regulatory Spud Date 6/16/2013 13:30	Rig Release Date/Time 7/27/2013 06:00	



Cement Fluid: Production Casing Cement						
Fluid Type	Fluid Description			Amount (s...)	Class	Volume Pumped (bbl)
Lead				247	16/35 Pozm	
Estimated Top (ftKB)	Est Btm (ftKB)	Yield (ft <sup>3</sup> /sack)	Mix H2O Ratio (gal/sack)	Free Water (%)		
0.0	5,388.0					
Density (lb/gal)	Plastic Viscosity (Pa*s)	Thickening Time (hr)	1st Compressive Strength (psi)			
Cement Fluid Additives						
Add	Type	Conc				
Cement Fluid: Production Casing Cement						
Fluid Type	Fluid Description			Amount (s...)	Class	Volume Pumped (bbl)
Tail				85	C	
Estimated Top (ftKB)	Est Btm (ftKB)	Yield (ft <sup>3</sup> /sack)	Mix H2O Ratio (gal/sack)	Free Water (%)		
0.0	5,388.0					
Density (lb/gal)	Plastic Viscosity (Pa*s)	Thickening Time (hr)	1st Compressive Strength (psi)			
Cement Fluid Additives						
Add	Type	Conc				
Cement Fluid: Production Casing Cement						
Fluid Type	Fluid Description			Amount (s...)	Class	Volume Pumped (bbl)
Lead						
Estimated Top (ftKB)	Est Btm (ftKB)	Yield (ft <sup>3</sup> /sack)	Mix H2O Ratio (gal/sack)	Free Water (%)		
0.0	5,388.0					
Density (lb/gal)	Plastic Viscosity (Pa*s)	Thickening Time (hr)	1st Compressive Strength (psi)			
Cement Fluid Additives						
Add	Type	Conc				
Cement Fluid: Production Casing Cement						
Fluid Type	Fluid Description			Amount (s...)	Class	Volume Pumped (bbl)
Tail						
Estimated Top (ftKB)	Est Btm (ftKB)	Yield (ft <sup>3</sup> /sack)	Mix H2O Ratio (gal/sack)	Free Water (%)		
0.0	5,388.0					
Density (lb/gal)	Plastic Viscosity (Pa*s)	Thickening Time (hr)	1st Compressive Strength (psi)			
Cement Fluid Additives						
Add	Type	Conc				

Well Name E317X Aneth Unit	API Number 4303750054	Qtr/Qtr NW SW	Section 17	TWN 40S	Range 24E	Regulatory Spud Date 6/16/2013	Field Name Aneth	State/Province Utah
Original KB Elevation (ft)	KB-Ground Distance (ft)		Total Depth (ftKB)		PBTD (All) (ftKB)			
4,636.40	16.50		5,622.0					

Vertical - Original Hole, 11/27/2013 9:23:07 AM



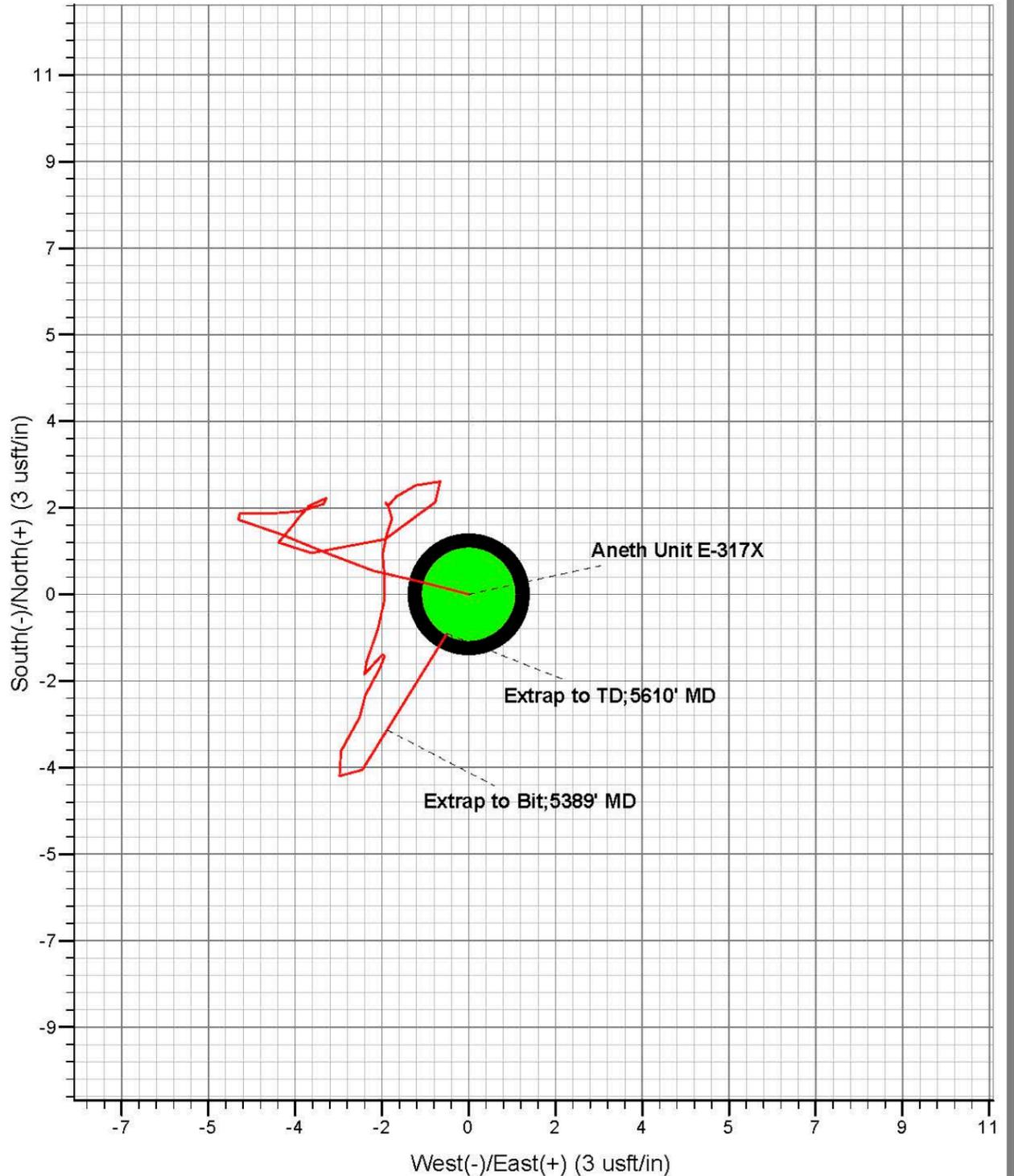
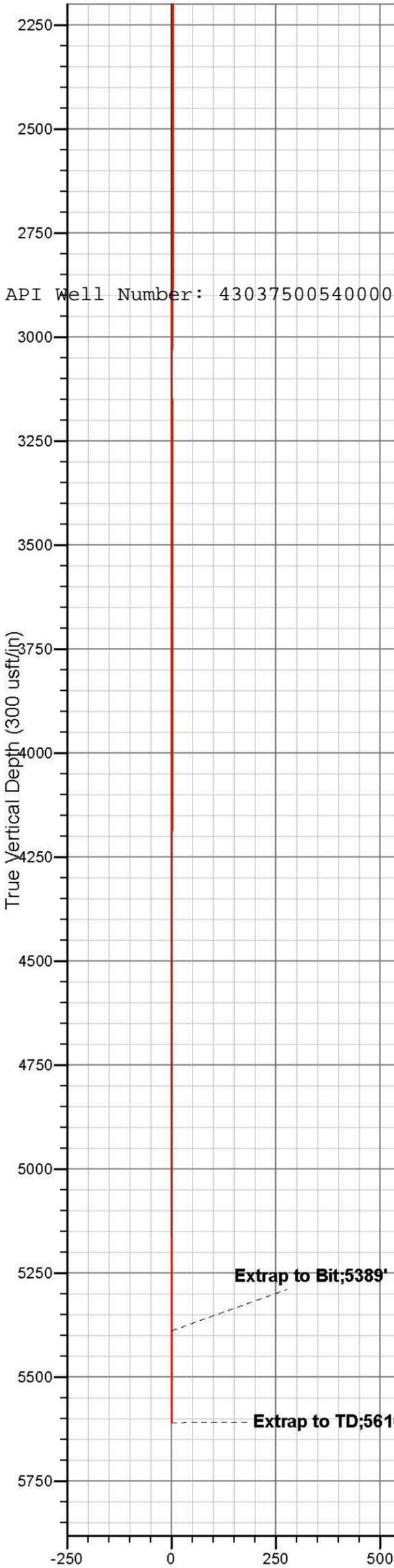
**Project:** San Juan County, UT (Nad 83)  
**Site:** NWSW Sec 17-T40S-R24E  
**Well:** Aneth Unit E-317X  
**Wellbore:** Vertical  
**Plan:** #1 Update

Geodetic System: US State Plane 1983  
 Ellipsoid: GRS 1980  
 Zone: Utah Southern Zone  
 Northing: 10083294.39  
 Easting: 2277097.58  
 Latitude: 37° 18' 27.029 N  
 Longitude: 109° 18' 38.700 W  
 Grid Convergence: 1.34° West  
 Ground Elevation: 4619.9  
 KB Elevation: RKB 2 @ 4631.9usft (D&J 1)



Azimuths to True North  
 Magnetic North: 10.36°

Magnetic Field  
 Strength: 50660.4snT  
 Dip Angle: 63.61°  
 Date: 6/17/2013  
 Model: IGRF2010



ANNOTATIONS		
TVD	MD	Annotation
5388.9	5389.0	Extrap to Bit;5389' MD
5609.9	5610.0	Extrap to TD;5610' MD

FORMATION TOP DETAILS  
 No formation data is available



Mesa West Directional  
Survey Report



<b>Company:</b>	Resolute Natural Resources	<b>Local Co-ordinate Reference:</b>	Well Aneth Unit E-317X
<b>Project:</b>	San Juan County, UT (Nad 83)	<b>TVD Reference:</b>	RKB 2 @ 4631.9usft (D&J 1)
<b>Site:</b>	NWSW Sec 17-T40S-R24E	<b>MD Reference:</b>	RKB 2 @ 4631.9usft (D&J 1)
<b>Well:</b>	Aneth Unit E-317X	<b>North Reference:</b>	True
<b>Wellbore:</b>	Vertical	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	#1 Update	<b>Database:</b>	EDM 5000.1 Single User Db

<b>Project</b>	San Juan County, UT (Nad 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Southern Zone		Using geodetic scale factor

<b>Site</b>	NWSW Sec 17-T40S-R24E		
<b>Site Position:</b>		<b>Northing:</b>	10,083,294.39 usft
<b>From:</b>	Map	<b>Easting:</b>	2,277,097.58 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	37° 18' 27.029 N
		<b>Longitude:</b>	109° 18' 38.700 W
		<b>Grid Convergence:</b>	1.34 °

<b>Well</b>	Aneth Unit E-317X		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>
			usft
			<b>Latitude:</b>
			37° 18' 27.029 N
			<b>Longitude:</b>
			109° 18' 38.700 W
			<b>Ground Level:</b>
			4,619.9 usft

<b>Wellbore</b>	Vertical				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
	IGRF2010	6/17/2013	(°)	(°)	(nT)
			10.36	63.61	50,680

<b>Design</b>	#1 Update				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	288.01	

<b>Survey Program</b>	<b>Date</b>	6/26/2013			
<b>From</b>	<b>To</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
(usft)	(usft)				
1,435.0	5,610.0	Survey #1 (Vertical)	MWD	MWD - Standard	

<b>Survey</b>											
<b>Measured</b>	<b>Inclination</b>	<b>Azimuth</b>	<b>Vertical</b>	<b>Subsea</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Vertical</b>	<b>Dogleg</b>	<b>Build</b>	<b>Turn</b>	
<b>Depth</b>	(°)	(°)	<b>Depth</b>	<b>(usft)</b>	<b>(usft)</b>	<b>(usft)</b>	<b>Section</b>	<b>Rate</b>	<b>Rate</b>	<b>Rate</b>	
(usft)			(usft)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
0.0	0.00	0.00	0.0	-4,631.9	0.0	0.0	0.0	0.00	0.00	0.00	
1,435.0	0.00	0.00	1,435.0	-3,196.9	0.0	0.0	0.0	0.00	0.00	0.00	
1,463.0	0.50	285.70	1,463.0	-3,168.9	0.0	-0.1	0.1	1.79	1.79	0.00	
1,556.0	0.60	283.50	1,556.0	-3,075.9	0.3	-1.0	1.0	0.11	0.11	-2.37	
1,650.0	0.60	282.70	1,650.0	-2,981.9	0.5	-1.9	2.0	0.01	0.00	-0.85	
1,744.0	0.60	299.00	1,744.0	-2,887.9	0.8	-2.9	3.0	0.18	0.00	17.34	
1,838.0	0.70	286.50	1,838.0	-2,793.9	1.2	-3.8	4.0	0.18	0.11	-13.30	
1,932.0	0.40	293.60	1,932.0	-2,699.9	1.5	-4.7	4.9	0.33	-0.32	7.55	
2,027.0	0.40	90.60	2,027.0	-2,604.9	1.7	-4.7	4.9	0.83	0.00	165.26	
2,122.0	0.40	89.70	2,122.0	-2,509.9	1.7	-4.0	4.3	0.01	0.00	-0.95	

Mesa West Directional  
Survey Report



<b>Company:</b>	Resolute Natural Resources	<b>Local Co-ordinate Reference:</b>	Well Aneth Unit E-317X
<b>Project:</b>	San Juan County, UT (Nad 83)	<b>TVD Reference:</b>	RKB 2 @ 4631.9usft (D&J 1)
<b>Site:</b>	NWSW Sec 17-T40S-R24E	<b>MD Reference:</b>	RKB 2 @ 4631.9usft (D&J 1)
<b>Well:</b>	Aneth Unit E-317X	<b>North Reference:</b>	True
<b>Wellbore:</b>	Vertical	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	#1 Update	<b>Database:</b>	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,215.0	0.30	80.90	2,215.0	-2,416.9	1.7	-3.4	3.8	0.12	-0.11	-9.46
2,311.0	0.30	63.60	2,311.0	-2,320.9	1.8	-3.0	3.4	0.09	0.00	-18.02
2,404.0	0.20	274.20	2,404.0	-2,227.9	2.0	-2.9	3.4	0.52	-0.11	-160.65
2,498.0	0.30	227.40	2,498.0	-2,133.9	1.8	-3.2	3.6	0.23	0.11	-49.79
2,593.0	0.10	202.30	2,593.0	-2,038.9	1.6	-3.5	3.8	0.22	-0.21	-26.42
2,687.0	0.20	225.10	2,687.0	-1,944.9	1.4	-3.6	3.9	0.12	0.11	24.26
2,781.0	0.30	216.80	2,781.0	-1,850.9	1.1	-3.9	4.0	0.11	0.11	-8.83
2,875.0	1.00	91.20	2,875.0	-1,756.9	0.8	-3.2	3.3	1.28	0.74	-133.62
2,969.0	0.90	66.30	2,969.0	-1,663.0	1.1	-1.7	2.0	0.45	-0.11	-26.49
3,063.0	0.70	36.80	3,062.9	-1,569.0	1.9	-0.7	1.2	0.48	-0.21	-31.38
3,155.0	0.30	263.00	3,154.9	-1,477.0	2.3	-0.6	1.3	1.01	-0.43	-145.44
3,250.0	0.30	258.70	3,249.9	-1,382.0	2.2	-1.1	1.7	0.02	0.00	-4.53
3,342.0	0.30	221.90	3,341.9	-1,290.0	2.0	-1.5	2.0	0.21	0.00	-40.00
3,436.0	0.00	122.20	3,435.9	-1,196.0	1.8	-1.6	2.1	0.32	-0.32	0.00
3,529.0	0.10	312.50	3,528.9	-1,103.0	1.9	-1.7	2.2	0.11	0.11	0.00
3,622.0	0.20	133.90	3,621.9	-1,010.0	1.8	-1.6	2.1	0.32	0.11	-192.04
3,716.0	0.20	195.50	3,715.9	-916.0	1.5	-1.6	2.0	0.22	0.00	65.53
3,812.0	0.20	201.90	3,811.9	-820.0	1.2	-1.7	2.0	0.02	0.00	6.67
3,907.0	0.30	183.90	3,906.9	-725.0	0.8	-1.7	1.9	0.13	0.11	-18.95
4,001.0	0.30	167.00	4,000.9	-631.0	0.3	-1.7	1.7	0.09	0.00	-17.98
4,095.0	0.30	195.70	4,094.9	-537.0	-0.1	-1.7	1.6	0.16	0.00	30.53
4,189.0	0.40	190.40	4,188.9	-443.0	-0.7	-1.8	1.5	0.11	0.11	-5.64
4,279.0	0.50	205.90	4,278.9	-353.0	-1.4	-2.1	1.6	0.17	0.11	17.22
4,369.0	0.20	53.20	4,368.9	-263.0	-1.6	-2.1	1.5	0.76	-0.33	-169.67
4,461.0	0.20	32.50	4,460.9	-171.0	-1.4	-1.9	1.4	0.08	0.00	-22.50
4,551.0	0.10	63.10	4,550.9	-81.0	-1.2	-1.8	1.3	0.14	-0.11	34.00
4,645.0	0.10	203.10	4,644.9	13.0	-1.3	-1.7	1.2	0.20	0.00	148.94
4,736.0	0.20	201.00	4,735.9	104.0	-1.5	-1.8	1.3	0.11	0.11	-2.31
4,827.0	0.20	214.40	4,826.9	195.0	-1.8	-1.9	1.3	0.05	0.00	14.73
4,922.0	0.20	202.00	4,921.9	290.0	-2.1	-2.1	1.4	0.05	0.00	-13.05
5,012.0	0.40	190.70	5,011.9	380.0	-2.5	-2.2	1.3	0.23	0.22	-12.56
5,105.0	0.60	220.90	5,104.9	473.0	-3.2	-2.6	1.5	0.35	0.22	32.47
5,196.0	0.40	117.30	5,195.9	564.0	-3.7	-2.6	1.4	0.87	-0.22	-113.85
5,289.0	0.40	32.30	5,288.9	657.0	-3.6	-2.2	1.0	0.58	0.00	-91.40
5,343.0	0.60	31.80	5,342.9	711.0	-3.2	-1.9	0.8	0.37	0.37	-0.93
<b>Extrap to Bit;5389' MD</b>										
5,389.0	0.60	31.80	5,388.9	757.0	-2.8	-1.7	0.7	0.00	0.00	0.00
<b>Extrap to TD;5610' MD</b>										
5,610.0	0.60	31.80	5,609.9	978.0	-0.8	-0.4	0.2	0.00	0.00	0.00

Mesa West Directional  
Survey Report



<b>Company:</b>	Resolute Natural Resources	<b>Local Co-ordinate Reference:</b>	Well Aneth Unit E-317X
<b>Project:</b>	San Juan County, UT (Nad 83)	<b>TVD Reference:</b>	RKB 2 @ 4631.9usft (D&J 1)
<b>Site:</b>	NWSW Sec 17-T40S-R24E	<b>MD Reference:</b>	RKB 2 @ 4631.9usft (D&J 1)
<b>Well:</b>	Aneth Unit E-317X	<b>North Reference:</b>	True
<b>Wellbore:</b>	Vertical	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	#1 Update	<b>Database:</b>	EDM 5000.1 Single User Db

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,389.0	5,388.9	-2.8	-1.7	Extrap to Bit;5389' MD
5,610.0	5,609.9	-0.8	-0.4	Extrap to TD;5610' MD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_