



February 5, 2014

## Engineering File Review and Report

Prepared by,

Mark Weems, P. E.  
Regional Engineer – SW Colorado  
Colorado Oil and Gas Conservation Commission

### COGIS - Field Inspection Report

API Number: 05-083-06622		Name: ISLAND BUTTE II UNIT #20	
Location: NWNW 22 38N 19W		Lat: 37.542734 Long: -108.939623	
Operator #: 91800		Operator Name: QUESTAR EXPLORATION AND PRODUCTION COMPANY	
Inspection Date: 8/15/2005		Inspector: MARK WEEMS	
Inspection was: Satisfactory			
Insp. Type: CA	Insp. Stat: DG	Reclamation (Pass, Interim or Fail):	P&A (Pass/Fail): P
Brhd. Pressure:	Inj. Pressure:	T-C Ann. Pressure:	UIC Violation Type:
Violation: N	NOAV Sent: N	Date Corrective Action Due:	Date Remedied:

Field Inspection Comments and Observations	
Insp. Comment	Inspection/Violation Comments
ACTION	NO
WORKOV	AS PER CONVERSATION WITH THE COMPANY DRILLING SUPERVISOR THE FOLLOWING WAS NOTED AND APPROVED: • THE COMPANY FAILED TO GIVE SPUD NOTICE. A WARNING WAS GIVEN AND THE INCIDENT FORGIVEN. • A FISH IN THE HOLE REQUIRING SETTING A 600' CEMENT PLUG AND KICKING OFF TO DRILL NEW HOLE WAS APPROVED. THE TOP OF FISH IS AT 3515' AND THE BOTTOM OF THE HOLE IS AT 5465' WHILE DRILLING WITH AN 8 1/4" BIT. THE FISH CONSISTS OF A BIT, SUB, 20 DRILL COLLARS, AND 42 JOINTS OF DRILL PIPE. A 600' CEMENT PLUG WAS SET FROM 2876'-3476'. CURRENT OPERATIONS INCLUDE DRESSING OFF THE CEMENT PLUG AND PREPARING TO KICK OFF AND COMMENCE DRILLING NEW HOLE.

8/12/2005

Halliburton whipstock and cement plug report

8 3/4" bit TD=3300' 260 sx class 'B' cement 15.6 ppg yld 1.18 cu ft/sk

Sketch shows tubular to 3507'

7/29/2005 to 9/3/2005

QEP Daily Reports

17 1/2" bit; run and cement one joint of 13 3/8" conductor

9 5/8 set at 1927.52' and cmt w/ 367 sx lead and 290 sx tail

Drill to 5464'; pressure loss; DS parted while tripping and left fish in hole (see PA WBD);

sidetrack plug set 3507'-2968' and 260 sx cmt

Dress of sidetrack plug to 3114'

**Sidetrack starts at 3150'; mud motor and MWD directional tools run and oriented (see reports dated 8/16/2005 – 8/18/2005)**

Drill to MTD=6230' (3' into salt)

Run DST

Receive plugging orders from COGCC

PLUG #1 - 6140' - 6040' - ACROSS DESERT CREEK TOP

PLUG #2 - 5876' - 5776' - ACROSS ISMAY TOP

PLUG #3 - 1972' - 1872' - ACROSS 9 5/8" CASING SHOE

PLUG #4 - 15' SURFACE PLUG

AS PER MR MARK WEEMS - COLO OIL / GAS CONSERVATION COMM  
RIG UP CEMENTERS - PLUG & ABANDON AS FOLLOWS:

PLUG #1 - 6140' - 6040' ACROSS TOP OF DESERT CREEK - 75 SKS 'G' CMT  
15.6# SLURRY - DISPLACE W/ HOLE MUD - TOOH TO 5876'

PLUG #2 - 5876' - 5776' ACROSS TOP OF ISMAY - 73 SKS 'G' CMT 15.6#  
SLURRY - DISPLACE W/ HOLE MUD - TOOH 10 STDS DP - CIRC

RIG REPAIR - DRUM CLUTCH ON DWWKS

LAY DOWN 132 JTS DP

PLUG #3 - 1972' - 1872' ACROSS 9 5/8" SHOE @ 1922' - 90 SKS 'G' CMT 15.6#  
SLURRY - DISPLACE W/ HOLE MUD

LAY DOWN DP

NIPPLE DOWN BOP

SURFACE PLUG 35' - SURFACE - 25 SKS 'G' CMT 15.6# SLURRY  
CLEAN MUD TANKS - FINISH NIPPLE DOWN

RIG RELEASED 0100 HRS 3 SEPT 2005

# wellbore Diagram

Form 6 #01636035

1/2

ISLAND BUTTE II UNIT NO. 20  
NW NW Sec. 22-T38N-R19W  
Montezuma County, Colorado



**RECEIVED**

MAY 11 2011

**COGCC**

Drilled by Patterson UTI Drilling  
Schematic - not drawn to scale - **BEFORE P&A**

## 13-3/8" OD Conductor

1 jt set @ 43' KBM

## 9-5/8" OD Surface Casing

43 jts 9-5/8", 36#, J-55, LTC	1881.97
1 9-5/8" float collar (Weatherford)	0.95
1 jt 9-5/8", 36#, J-55, LTC	43.50
1 9-5/8" guide shoe (Gemeco)	1.10
total	1927.52

PUMP 20 BBLS H2O AHEAD - CEMENT W/ 357 SKS 65/35 G-POZ 6% GEL  
.25# SK D29 .2% D46 2% CACL2, LEAD CEMENT 13.1 PPG, YIELD 1.67  
CU/FT SK TAIL W/ 290 SKS G .25# SK D29 .2% D46 15.8PPG YIELD 1.18  
CU/FT SK - DISPLACE W/ 144 BBLS H2O - BUMP PLUG W/ 835 PSI- FLOAT  
HELD 22 BBLS CEMENT TO SURFACE PIT

13-3/8" @ 43' KBM

KB 8571'

13.0' KB

GL 8558'

12-1/4" hole

9-5/8" @ 1928' KBM

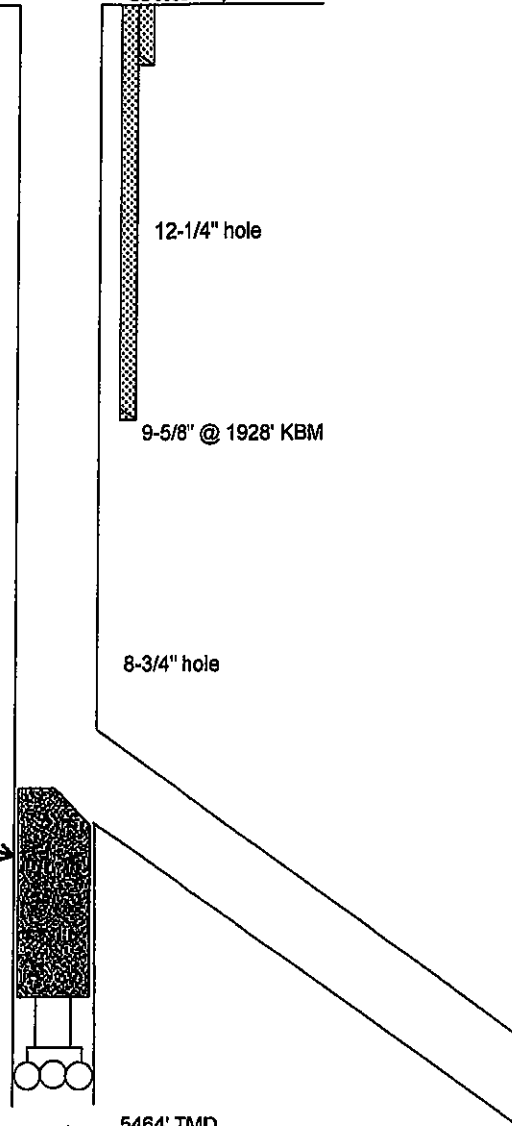
8-3/4" hole

sidetrack plug  
set @ 3507'  
260 sx. cement

43 jts DP  
20 DC's  
Bit Sub  
Bit  
(unable to fish)

5464' TMD

6230' TMD



ISLAND BUTTE II UNIT NO. 20  
 NW NW Sec. 22-T38N-R19W  
 Montezuma County, Colorado

Drilled by Patterson UTI Drilling  
 Schematic - not drawn to scale - **AFTER P&A**

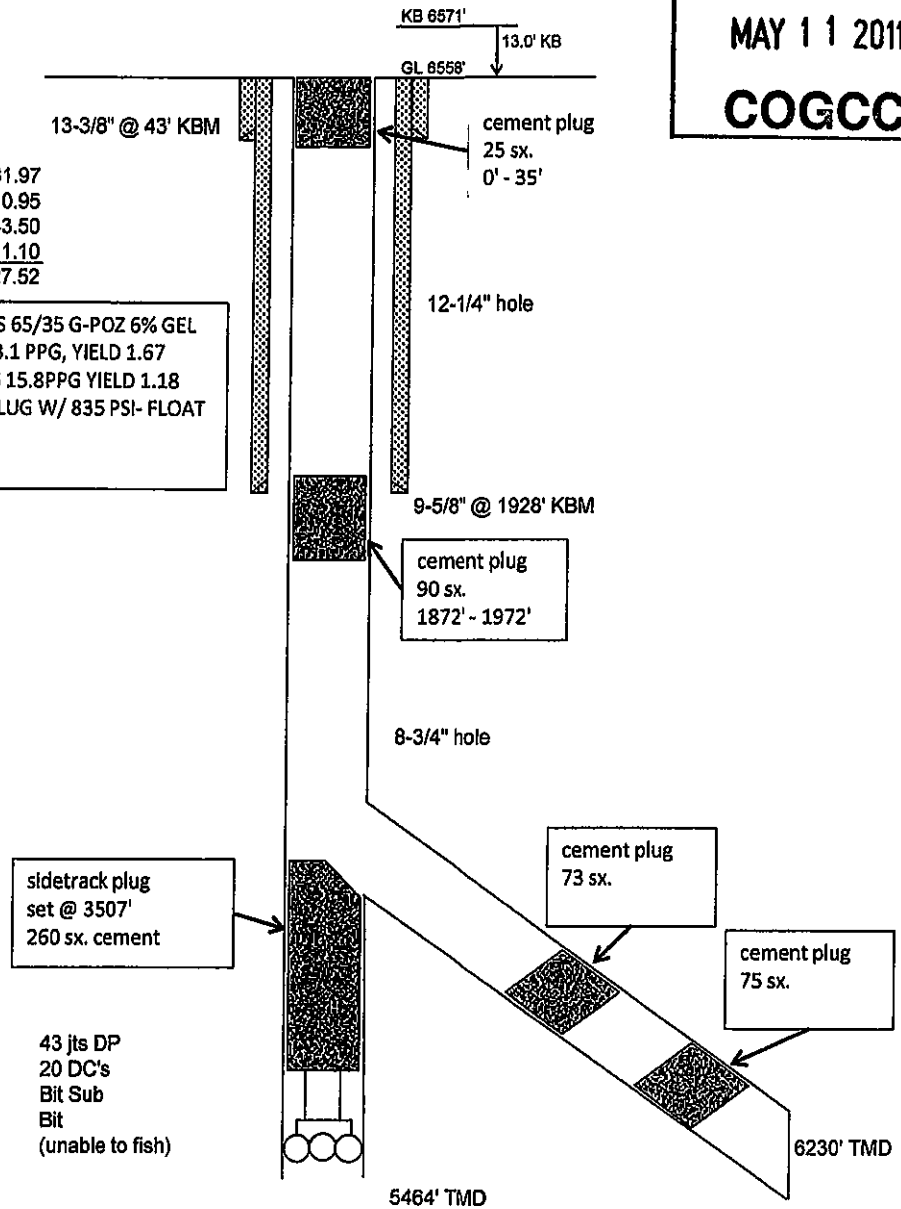
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 HELD 22 BBLS CEMENT TO SURFACE PIT



**RECEIVED**  
**MAY 11 2011**  
**COGCC**

2/11/2011

Preliminary Drilling Completion Report Received

Vertical well

16. Total Depth	MD	6230	TVD**	1922	17 Plug Back Total Depth	MD	3496	TVD**	6228
18. Elevations	GR	6553	KB	6580	One paper copy of all electric and mud logs must be submitted, along with one digital LAS copy as available.				
19. List Electric Logs Run:									
GR, NEUTRON DENSITY, POROSITY RESISTIVITY									

20. Casing, Liner and Cement:

CASING									
Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Top	Cmt Bot	Status
SURF	12+1/4	9+5/8		0	1,928	260	0	1,928	CALC

Method used	String	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom

Details of work:

21. Formation log intervals and test zones:

FORMATION LOG INTERVALS AND TEST ZONES					
FORMATION NAME	Measured Depth		Check if applies		COMMENTS (All DST and Core Analyses must be submitted to COGCC)
	Top	Bottom	DST	Cored	
DESERT CREEK	6,080		<input type="checkbox"/>	<input type="checkbox"/>	
AKAH SALT	6,190		<input type="checkbox"/>	<input type="checkbox"/>	
SALT WASH	6,225		<input type="checkbox"/>	<input type="checkbox"/>	

Comment:

FORMATION LOG INTERVALS AND TEST ZONES: FORMATION NAME: DESERT CREEK POR. MEASURED DEPTH TOP: 6130'; CHIMNEY ROCK SH. MEASURED DEPTH TOP: 6175'; TD MEASURED DEPTH TOP: 6230'.  
COMMENTS: PLEASE NOTE: LAS LOGS HAVE BEEN SUBMITTED ELECTRONICALLY VIA E-MAIL, PER KATHLEEN MILLS. OPERATIONS SUMMARY REPORT IS ALSO ATTACHED.

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: \_\_\_\_\_

Print Name: SARAH BOXLEY

Title: PERMIT AGENT

Date: 2/9/2011

Email: SARAH.BOXLEY@QEPRES.COM

**Attachment Check List**

Att Doc Num	Document Name	attached ?	
<u>Attachment Checklist</u>			
1633748	CMT Summary *	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Core Analysis	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Directional Survey **	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	DST Analysis	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Logs	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
1633747	Other	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<u>Other Attachments</u>			
1633746	DRILLING COMPLETION REPORT	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
1633749	OPERATIONS SUMMARY	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
400184571	FORM 5 SUBMITTED	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

5/11/2011

Final Drilling Completion Report is received

Vertical well

12. Spud Date: (when the 1st bit hit the dirt) <u>07/30/2005</u> 13. Date TD: <u>08/30/2005</u> 14. Date Casing Set or D&A: _____											
15. Well Classification: <input checked="" type="checkbox"/> Dry <input type="checkbox"/> Oil <input type="checkbox"/> Gas/Coalbed <input type="checkbox"/> Disposal <input type="checkbox"/> Stratigraphic <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Storage <input type="checkbox"/> Observation											
16. Total Depth		MD	<u>5464</u>	TVD**	_____	17 Plug Back Total Depth		MD	<u>3496</u>	TVD**	_____
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19. List Electric Logs Run: <u>GR, NEUTRON DENSITY, POROSITY, RESISTIVITY</u>											
20. Casing, Liner and Cement:											
<b>CASING</b>											
Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Top	Cmt Bot	Status		
CONDUCTOR	17+1/2	13+3/8			43		0	43			
SURF	12+1/4	9+5/8		0	1,928	657	0	1,928	CALC		
1ST	8+3/4		0	0	0	0	0	0			

Date Run: 2/5/2014 Doc [#1636111] Well Name: ISLAND BUTTE II UNIT 20

Page 1 of 2

**STAGE/TOP OUT/REMEDIAL CEMENT**

Cement work date: \_\_\_\_\_

Method used	String	Cementing tool setting/perf depth	Cement volume	Cement top	Cement bottom

Details of work: \_\_\_\_\_

21. Formation log intervals and test zones:

**FORMATION LOG INTERVALS AND TEST ZONES**

FORMATION NAME	Measured Depth		Check if applies		COMMENTS (All DST and Core Analyses must be submitted to COGCC)
	Top	Bottom	DST	Cored	
DESERT CREEK	6,080		<input type="checkbox"/>	<input type="checkbox"/>	
AKAH SALT	6,190		<input type="checkbox"/>	<input type="checkbox"/>	
SALT WASH	6,225		<input type="checkbox"/>	<input type="checkbox"/>	

Comment: \_\_\_\_\_

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Title: PERMIT AGENT

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1636113	CMT Summary *	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Core Analysis	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Directional Survey **	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
1636112	DST Analysis	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Logs	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	Other	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>Other Attachments</u>			
1636111	FORM 5 SUBMITTED	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
1636114	OPERATIONS SUMMARY	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>