Submit To Appropriate District Office State Lease - 6 copies Fee Lease - 5 copies <u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II

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

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

District IV

State of New Mexico Energy,

Form C-105 Revised March 25, 1999

 \mathbf{C} 1

, Minerals and Natural Resources	Revised March 25, 1999					
,	WELL API NO.					
Oil Conservation Division	30-045-31435					
	5. Indicate Type of Lease					
220 South St. Francis Dr.	STATE FEE					
Santa Fe, NM 87505	State Oil & Gas Lease No.					
	NMOCD ORDER NO. R-10987-A					
PLETION REPORT AND LOG	A STATE OF THE STA					
OTHER SEP 200	Lease Name or Unit Agreement Name					

WELL CO	MPI	ETION	OR R	ECO	MPL	ETION REPOR							
la. Type of Well:	. [0.40 1115		DDII		()	ં ડ	Ep on		7 Lease N	lame or Ur	it Agreemen	t Name
b. Type of Comple	L 🔲	GAS WE	LL 🛛	DRY	Ц	OTHER		ે' રેઈ∂3 –	- [
NEW W	ORK	☐ DEEP	EN 🗌	PLUG		DIFF.	\$.	<u>.</u>		당		HORTON	
	VER			BACK		RESVR. OTHE	ER			[2]			
2. Name of Operator		Duestar F	xnlorati	on and	Prod	luction Company	3			8 Well N	0.	2 C	
3. Address of Operat		Questar I	Apiorau	on and	1100	detion company		1	1 3	9. Pool na	me or Wild		
	1050	Seventee	nth Stre	et, Sui	te 50	0, Denver CO, 80	<u>265 / 1</u>	1048	77		BLANC	O MESA	VERDE
4. Well Location								مسسد طار تشدون					
Unit Letter			1865 F	eet Fron	n The	SOUTH	Line and	725		Feet Fro	om The	EAST	Line
NE SE	Section	22		ship 32			West	San Ju	ıan ,	County N	iM	D. I.O. I	
10 0 . 0 . 11 1 1	10	0			<u> </u>	1/2 1 2 1		F1	(DE	A DVD DT	OB \	112 11	
10. Date Spudded	10.	Date T.D. R	eached	111. 1	Date C	ompl. (Ready to Prod.) 12.	Elevations	s (DF	& RKB, RT,	GR, etc.)	13. 116	ev. Casinghead
4/14/03		4/26/03				5/13/03				F 6356' GI			6345'
15. Total Depth		16. Plug B	ack T.D.			Multiple Compl. How	Many	18. Interv		Rotary Tool	ls	Cable	Tools
5860'	ŀ		5732'		Zones	!		Drilled By	y	0.	- TD		N/A
19. Producing Interv	al(s), c	of this comp	letion - To	op, Botto	om, Na	ame		·				Directional	Survey Made
46101 5	(201.)											VEC	
21. Type Electric an		Aesaverde								22. Was Wo	ell Cored	YES	
\		-									· · · · · · · · · · · · · · · · · · ·		-
HRTT, S	SDL/ D	SN		—–						L		NO	
23.						SING RECOR			trin				
CASING SIZE 9 5/8"	7<	WEIG	HT LB./F [*] 36#	<u>r.</u>		DEPTH SET	HOLE SIZE 12.5"		CEMENTING RECORD AMOUNT PULLED 125 sks None				
7"			23#	-+		3407'	2		125 sks None 410 sks None				
	^			t		2107		£ 35					
												_	
24. / 1		 			LIN	ER RECORD			25.		TUBING	RECORD	
10.3 SIZE K		TOP	E	BOTTON	M	SACKS CEMENT	SC	REEN		SIZE	DI	PTH SET	PACKER SET
4 1/2"		3281'		5860'		285 sx 3	ļ			2 3/8"		4575'	
26. Perforation re	cord (i	nterval size	and num	her)		<u> </u>	27 AC	TOH2 OF	ED.	ACTURE, C	EMENT	SOUREZE	FTC
20. Torroration to	cora (n	11101 741, 5120	, una nam	,				INTERVAL				D MATERIA	
See attached OER (~amm1a	tion Dranad	luma Damam	t for Don	·Famatia	m manand (imtamus)	46	13' - 4988'		45,354 gal			cf N2, 118,500 lb
See attached, QEP (size and number).	Jonipie	non Froced	iure Kepor	t for Per	тоганс	on record (interval,	50	066' - 5310'		Proppant 62 157 cml	Class duid	1 145 4 14	scf N2, 116,415 lb
Í							30	00 - 3310		Proppant	Clear Huld	, 1,143.4 IVIS	CI N2, 110,413 ID
							53	70' - 5630'		48,413 gal	Clear fluid	, 1,159.0 Ms	scf N2, 114,139 lb
										Proppant.			
PRODUCTION Date First Production Production Method (Flowing, gas lift, pumping - Size and type pump) Well Status (Prod. or Shut-in)													
Date First Production	n		Productio	on Metho	od (Fle	owing, gas lift, pumpin	g - Size an	d type pump)	Well Stati	us (<i>Prod. o</i>	r Shut-in)	
5/19/	03			Flowin	ng _						Producin	g	
Date of Test	Hours	Tested	Chol	ke Size		Prod'n For	Oil - Bb	1	Gas	- MCF	Water	- Bbl.	Gas - Oil Ratio
5/19/03		24 hrs		20/64		Test Period		0		550		0	
Flow Tubing	Casin	g Pressure		ulated 24	4-	Oil - Bbl.	Gas	- MCF	7	Water - Bbl.	10		API - (Corr.)
Press. 740 psig		740 psig	Hour	r Rate				550		^			
29. Disposition of C			fuel, vente	ed, etc.)		0		550	L_	0	Test Wi	tnessed By	
Sold Kirby Sanchez													
30. List Attachment	s												
Change of Operator	form	C-104A, R	equest for	Allowab	le and	Authorization to Tran	sport form	C-104, Con	pleti	on Procedure	Gas Anal	sis, Spud Su	ndry Form C-103.
31 .1 nereby certif	Change of Operator form C-1044, Request for Allowable and Authorization to Transport form C-104, Completion Procedure, Gas Analysis, Spud Sundry Form C-103. 31 I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief												
Printed Signatur	Printed Signature: Dea Otecle Name: Bea Steele Title: Sr. Engineering Analyst Date: 9/18/03						Sr.						

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 25 through 29 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1105.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE Southeastern New Mexico Northwestern New Mexico T. Penn. "B" T. Anhy T. Canyon T. Ojo Alamo T. Penn. "C" T. Salt T. Strawn T. Kirtland-Fruitland 2615 B. Salt T. Atoka T. Pictured Cliffs 3095 T. Penn. "D" T. Leadville_____ T. Yates T. Miss _____ T. Cliff House 4906 T. Devonian T. 7 Rivers_____ T. Madison T. Menefee 5000 T. Queen_____ T. Silurian _____ T. Point Lookout 5358 T. Elbert T. Grayburg T. Montoya T. Mancos <u>5690</u> T. McCracken T. Simpson____ T. Gallup_____ T. Ignacio Otzte____ T. San Andres_____ T. McKee_____ T. Glorieta_____ Base Greenhorn T. Granite____ T. Paddock____ T. Ellenburger____ T. Dakota T. Gr. Wash____ T. Morrison T. Blinebry T. Delaware Sand T.Todilto_____ T.Tubb T. Drinkard ______ T. Bone Springs T. Entrada____ T. Wingate____ T. Abo T. ____ T. Chinle T. Wolfcamp_____ T.____ T. Penn T. _____ T. Permian T. Cisco (Bough C) T. Penn "A" SANDS OR ZONES No. 3, from.....to..... No. 4, from.....to.... **IMPORTANT WATER SANDS** Include data on rate of water inflow and elevation to which water rose in hole. No. 1, from......to.....feet..... No. 2, from to feet. No. 3, from......to....feet LITHOLOGY RECORD (Attach additional sheet if necessary) Thickness Thickness To From From Lithology Lithology In Feet In Feet Ojo Alamo Ss. 1208 Fruitland 2615 3095 Picutred Cliffs Ss. 3256 Lewis Sh. 4906 Cliff House Ss. 5000 Menefee Fm. 5358 Point Lookout Ss. 5690 Mancos Sh.

State of New Mexico
Energy, Minerals & Natural Resources
Oil Conservation Division
1000 Rio Brazos Rd.
Aztec, NM 87410

Horton No. 2C NE SE Sec. 22, T32N, R11W

	Top
Name	Meas. Depth
Ojo Alamo Ss.	1208
Fruitland	2615
Picutred Cliffs Ss.	3095
Lewis Sh.	3256
Cliff House Ss.	4906
Menefee Fm.	5000
Point Lookout Ss.	5358
Mancos Sh.	5690

Questar Exploration and Production Company

Completion Procedure May 2, 2003

Horton 2 C 1910' FSL & 760' FEL Section 22, T32N-R11W San Juan County, New Mexico

Well Data:

Elevation:

GL = 6,350', KB = 6,362'

Surface Pipe:

5 jts - 9 5/8", 36 #/ft, K-55, LT&C, 8rd set @ 226.71' KB.

Cemented w/ 120 sx Class "G" w/ 2% CaCl2. Recovered

8 bbls cement (did not fall back).

Intermediate:

82 jts – 7", 23 #/ft, J-55,P-110, LT&C, 8rd set @ 3407' KB, Float Collar @ 3360' KB, DV Tool @ 2832' KB. Cement 1st stage w/ 100 sx 50/50 Poz with full returns. Cement 2nd stage w/ 360 sx Econolite & tailed with 50 sx 50/50 Poz. Lost returns 70 bbls into displacement.

Estimated TOC @ 1000'.

Liner:

66 jts $-4 \frac{1}{2}$ ", 10.5 #, K-55, ST&C set @ 5860' KB. Float collar at 5818' KB. TOL at 3281' KB. Cemented w/ 285 sx 50/50 B Poz. Circulated 16 bbls cement off top of liner.

Open Hole Logs:

Halliburton on April 25, 2003

HRI, HRTT, SDL/DSN.

Completion Procedure Page 2 Horton 2C May 2, 2003

- 1. MIRU. NU BOP. Set 11-400 bbl frac tanks and fill w/ 2% KCl water. Dowell will add biocide to tanks one day before frac.
- 2. PU 2 3/8" tubing and strap in hole w/ 3 7/8" bit and scraper. Drill/clean-out to float collar set @ 5818' KB. Circulate hole clean.
- 3. RU Computalog. Run GR/CCL/CBL from PBTD to liner top @ 3281' KB under 500 psig. RD Computalog and pressure test casing to 3500 psig for 15 minutes.
- 4. If CBL indicates Mesaverde formation has good bond and adequate isolation, perforate the 1st stage of the Mesaverde (per SDL dated 4/25/03) w/ 3 1/8" casing gun, 12 gram charges, 0.32" diameter hole as follows:

<u>Interval</u>	<u>SPF</u>	<u>Phasing</u>
5370'	1	None
5378'	1	None
5408'	1	None
5416'	1	None
5424'	1	None
5430'	1	None
5470'	1	None
5560'	1	None
5618'	1	None
5630'	1	None

RU Dowell to breakdown and ball out 1st stage of Mesaverde as per approved procedure. A junk basket will be run on wireline to retrieve balls prior to frac. MAXIMUM PRESSURE FOR ALL STAGES IS 3500 PSIG.

5. Immediately after fraccing the 1st stage, wireline set a composite frac plug @ 5330'. Pressure test plug to 3500 psig. If pressure holds, perforate as follows:

5066'	1	None
5074'	1	None
5104'	1	None
5118'	1	None
5168'	1	None

Completion Procedure Page 3 Horton 2C May 2, 2003

5228'	1	None
5249'	1	None
5262'	1	None
5280'	1	None
5296'	1	None
5310'	1	None

Breakdown, retrieve balls and frac the 2 nd stage down casing.

6. Immediately after fraccing the 2 nd stage, wireline set a composite frac plug @ 5030'. Pressure test plug to 3500 psig. If pressure holds, perforate as follows:

4	4613'	1	None
4	4666'	1	None
4	4706'	1	None
4	4716'	1	None
4	4762'	1	None
4	4 916'	1	None
4	4920'	1	None
4	1 938'	1	None
4	1948'	1	None
4	1 956'	1	None
4	4962'	1	None
2	1972'	1	None
4	4980'	1	None
4	4988'	1	None

Breakdown, retrieve balls and frac the 3 rd stage down casing.

- 7. Flow back load immediately through a 20/64ths choke.
- 8. After well loads up and logs off, TIH with 2 3/8" tubing and 3 7/8" bit. Drill out frac plugs and clean out to PBTD. Land tubing with seating nipple open-ended at +/-5000'.
- 9. Swab tbg as required to unload well and kickoff.
- 10. Turn well over to Hallador for production after well cleans up.

C INC. ON-SITE GAS ANALYSIS -2 1523 W. AZTEC BLVD.

AZTEC, NM 87410 505-333-2003

Source: QUESTAR E&P

Report Date: 05/13/2003 07:56:11

Station #:

Sample Date:

Station Name: HORTON #2C

Flowing Pressure: 0

05/13/2003

Field:

Flowing Temp.: 0

psig F

Method: c:\mti\ezchrom\200\methods\btu_2.met File: c:\mti\ezchrom\200\chrom\horto\overline2c.2

Gas Analysis by Chromatograph

Name	Mole %	BTU	RD	GPM
Nitrogen	2.747	0.000	0.027	
Methane	79.765	807,490	0.442	
CO2	1.447	0.000	0.022	
Ethane	9.882	175.276	0.103	2.643
Propane	3.925	98.985	0.060	1.082
i-Butane	0.777	25.326	0.016	0.254
n-Butane	0.875	28.611	0.018	0.276
i-Pentane	0.288	11.549	0.007	0.105
n-Pentane	0.192	7.715	0.005	0.070
Hexanes	0.086	4.100	0.003	0.035
Heptanes	0.016	0.882	0.001	0.007
Octanes	0.000	0.000	0.000	
Nonanes	0.000	0.000	0.000	
	100 000	1150 005	0 804	4 470
Ideal Total	100.000	1159.935	0.701	4,472
Unnormalized Total	104.852			
Gross BTU/Real Cu.	Gasoli	ne Conte		

(@ 60 deg F, 14.730) Propane GPM = 0.254Dry = 1163.547 Sat. = 1144.595 Butane GPM = 0.381Gasoline GPM = 0.112Actual = 1163.54726# Gasoline GPM = 0.2180.000 lbs. water/MMCF) Total GPM = 4.472

> Real Relative Density Calculated = 0.7028 On-Site Relative Density = 0.0000

> > Gas Compressibility = 0.9969



, NM

WELL NAME: HORTON 2C

FIELD:

BLANCO MESA VERDE

COUNTY & STATE: SAN JUAN

DISTRICT:

LOCATION: NESE SEC. 22, T32N, R11W

CONTRACTOR: BEARCAT

WI%: 25.00000 AFE#: 2003-3

API#: 03-045-31435

PLAN DEPTH: 5,250

SPUD DATE:

4/14/2003

DHC:

CWC:

AFE TOTAL:

FORMATION:

MESAVERDE

REPORT DATE: 4/15/2003

MD: 224 CC: \$0

TVD : 0

DAYS: 0

MW:

VISC:

DAILY: DC: \$69,542 DAILY DETAILS: MIRU Bearcat Rig #1. TC: \$69,542

CUM: DC: \$69,542

CC: \$0

TC: \$69.542

Drill Rat Hole & Mouse Hole. Drilled 12-1/4" Hole from 0' - 135' 90'/hr. Wire line survey @ 103' 3/4 deq. Drilled 12-1/4" hole from 135' to 224' 118.6'/hr. Wire line survey @ Rig up csg crew. Ran 5 jts of 9-5/8", 36.0#, K-55, LT&C csg. Total 197' 1/2 deg. TOOH for csg. Length 226.71', csg equipped w/ guide shoe & insert baffle plate & 3 centralizers, located in middle of bottom jt. and every other one. Rig-up Cementers (Halliburton), safety meeting. Cemented csg w/125 sks. Class G cmt. w/ 2% CaC12, 1/4#/sks. Flocele, full returns thru-out job. Recovered 10 bbls of cmt. Halliburton over-displaced csg, circulated out cmt. Circulated water w/dye. Pumped 23 bbls, recovered green dye. Csg and annulas = 23.35 bbls. Wait on cement from yard. Circulate with rig equipment while waiting on cmt. Full returns. Maximum pressure Halliburton pumped 800 psi., csg internal yield = 3520 psi, 70% = 2464 psi. Will re-cement and displace to insert and shut-in cmt head.

REPORT DATE: 4/16/2003

MD: 307

TVD : 0

DAYS:

MW:

VISC:

DAILY: DC: \$20,761

CC: <u>\$0</u>

TC: \$20,761

CUM: DC: \$90,303

CC: \$0

TC: \$90,303

DAILY DETAILS: Cmt 9-5/8" surface csg w/ 120 sks Class G cmt. Full returns, recovered 8 bbls. Cmt. WOC. Cut-off csg. Weld on csg head. Test to 1000 psi. Nipple-up BOP's. Test BOP's w/ Quadco, Blind Rams, Pipe Rams, Floor Valve, Kelly Valve, Choke Valve - 2000 psi, csq - 1500 psi. service. Drill cmt, insert and shoe. Drilled 8-3/4" hole from 224' to 307' 55.33'/ hr.

REPORT DATE: 4/17/2003 MD: 1,975 DAILY: DC: \$9,910

TVD : 0

DAYS:

MW:

VISC:

CC: \$0

TC: \$9,910

CUM: DC: \$100,213

CC: \$0

TC: \$100,213

DAILY DETAILS: DRILLED 8-3/4" HOLE FROM 307' - 745' 87.6'/ HR. WIRE LINE SURVEY @ 703' - 3/4 DEG. DRILLED 8-3/4" HOLE FROM 745' TO 1155' 126.2'/ HR. SPR/ OP DRILL. SERVICE. DRILLED 8-3/4" HOLE FROM 1155' TO 1250' 63.3'/ HR. WIRE LINE SURVEY @ 1220' DEG, RIG SERVICE. DRILLED 8-3/4" HOLE FROM 1250' TO 1305' 55.0'/ HR. RIG SERVICE. DRILLED 8-3/4" HOLE FROM 1305' TO 1754' 64.2'/ HR. WIRE LINE SURVEY @ 1717' TO 1/2 DEG, RIG SERVEY.

DRILLED 8-3/4" HOLE FROM 1754' TO 1975' 55.3'/ HR.

REPORT DATE: 4/18/2003 DAILY: DC: \$10,397

MD: 2,895

TVD : º

DAYS:

MW:

VISC:

CC: \$0

TC: \$10,397

CUM: DC: \$110,610

CC: \$0

TC: \$110,610

DAILY DETAILS: DRILLED 8-3/4" HOLE FROM 1975' TO 2261' 38.2'/HR. WIRE LINE SURVEY @ 2224' - 3/4 DEG. RIG SERVICE. DRILLED 8-3/4" HOLE FROM 2261' TO 2388' 36.3'/HR. RIG SERVICE. DRILLED 8-3/4" HOLE FROM 2388' TO 2768' 46.1'/HR. WIRE LINE SURVEY @ 2733' - 1 DEG.

DRILLED 8-3/4" HOLE FROM 2788' TO 2895' 36.3'/HR.

REPORT DATE: 4/19/2003 MD: 3,113

TVD : 0

DAYS:

MW:

VISC:

DAILY: DC: \$20,845

CC: \$0

TC: \$20,845

CUM: DC: \$131,455

CC: \$0

TC: \$131,455

DAILY DETAILS: DRILLED 8-3/4" HOLE FROM 2895' TO 2990' 31.7'/HR. RIG SERVICE. DRILLED 8-3/4" HOLE TOOH - 6 STANDS - 2753'. FROM 2990' TO 3113' 49.2'/HR. FILL BACKSIDE, ESTABLISH CIRCULATION @ 2753'. MIX MUD, CONDITION HOLE @ 2753'. TIH 3 STDS, BREAK CIRCULATION, TIH 2 STDS BREAK CIRCULATION. MIX PILL, TIH TO 3113', LOST COMPLETE TOOH 6 STANDS - 2753', MIX MUD W/ 20% LCM, FILL BACKSIDE (140 BBLS), BREAK RETURNS. BUILD MUD VOLUME W/ 20% LCM @ 2753'. STAGE IN HOLE TO 3113', CIRCULATION. CIRCULATING, LOST CIRCULATION @ 3113', SERVER TORQUE @ 3113'. TOOH - 3 STANDS -BUILD MUD VOLUME W/ 30% LCM @ 2924'. FILL BACKSIDE @ 2924' WITH 90 BBLS. 2924'. TOOH TO CHECK BIT. TOTAL LOSS = 920 BBLS.

REPORT DATE: 4/20/2003

MD: 3,244

TVD : 0

DAYS:

MW:

VISC:

DAILY: DC: \$10,525

CC: \$0

TC: \$10,525

CUM: DC: \$141,980

CC: \$0

TC: \$141,980

DAILY DETAILS: TOOH, CHECK BIT, PICK-UP BIT #3 (RE-RUN W/ 3-14 JETS), REMOVE DRILLSTRING FLOAT. BUILD MUD VOLUME. TIH TO 2813', FILL ANNULAS - 5 BBLS, CIRCULATE, CONDITION MUD AND HOLE TIH TO 2993', CIRCULATE, BUILD & CONDITION MUD. STAGE IN HOLE AND CIRCULATE FROM 2993' TO 3113'. 8-3/4" HOLE FORM 3113' TO 3174' 20.3'/HR. - SEVERE TORQUE, HIGHLY FRACTURED. DROP SURVEY, TOOH TO CHECK BIT. RIG SERVICE. TIH. DRILLED 8-3/4" HOLE FROM 3174' TO 3244' 11.7'/HR. - WOB - 25,000#, RPM -NO PROBLEMS. 80, SEVERE TORQUE W/ WT. ABOVE 25K.

REPORT DATE : 4/21/2003

MD: 3,465

TVD : 0

DAYS:

MW:

VISC:

DAILY: DC: \$18,573

CC: \$0

CUM: DC: \$160,553

CC: \$0

TC: \$160,553

TC: \$18,573

DAILY DETAILS: DRILLED 8-3/4" HOLE FROM 3244' TO 3377' 20.46'/HR. RIG SERVICE. DRILLED 8-3/4" HOLE CIRCULATE. FROM 3377' TO 3465' 27.07'/HR. SHORT TRIP 6 STANDS. CIRCULATE. DROP SURVEY, PUMP PILL. TOOH FOR LOGS, (SLM = 3466.28' - NO CORRECTION). RU LOGGERS, (HLS), LOG WELL - LOGGER TD = 3465', DRILLER TD = 3465', RIG DOWN LOGGER.

TIH, BREAK CIRCULATION @ 2400', TIH.

REPORT DATE: 4/22/2003

MD: 3,465

 $\nabla D : 0$

DAYS:

MW:

VISC:

DAILY: DC: \$38,488

CC: \$0

TC: \$38,488

CUM: DC: \$199,041

CC: \$0

TC: \$199,041

DAILY DETAILS: BUILD MUD VOLUME. TIH - 3465'. CIRCULATE. LDD & DC'S. RIG UP CSG CREW. 7", 23.0#, P-110 & K-55, LT&C CSG, TOTAL LENGTH = 3421.9' W/ FLOAT EQUIPMENT, HIT BRIDGE @ 3408' ATTEMPT TO WASH THRU BRIDGE W/ RIG PUMPS - NO GO, RIG UP HALLIBURTON, 800 PSI @ 6 BPM - NO GO. CSG LANDED @ 3407.10' KB, FLOAT COLLAR @ 3359.69' KB, DV TOOL @ 2831.86' KB. PREPARE TO CMT. RIG DOWN CSG CREW, RU CEMENTERS (HALLIBURTON). CMT 1ST STAGE, FULL RETURNS, PLUG DOWN @ 2330 HRS. - OK. DROP BOMB - OPEN DV TOOL, CIRC. W/ FULL RETURNS. CMT 2ND STAGE, LOST CIRC WITH 70 BBLS INTO DISPLACEMENT, DISPLACED WITH 112 BBLS WTR, BUMPED PLUG @ 5:45 HRS - OK. ESTIMATED TOP OF CMT @ 1000' RIG DOWN CEMENTERS.

REPORT DATE: 4/23/2003

MD: 3,465

TVD : º

DAYS:

MW:

VISC:

DAILY: DC: \$20,386

CC: \$0

TC: \$20,386

CUM: DC: \$219,427

CC: \$0

TC: \$219,427

DAILY DETAILS: N/D BOP'S, SET 7" CSG SLIPS, CUT - OFF CSG, N/U BOP'S. TEST BOP'S W/ QUADCO - 2000 PSI,

CSG - 2000 PSI. RIG REPAIR (RIGHT ANGLE DRIVE).

REPORT DATE: 4/24/2003 MD: 3,465

TVD : Q

DAYS:

MW:

VISC:

DAILY: DC: \$7,627

TC: \$7,627

CUM: DC: \$227,054

CC: \$0

TC: \$227,054

DAILY DETAILS: RIG REPAIR (RIGHT ANGLE DRIVE).

CHANGE OUT KELLY, STRAP BHA.

PICK - UP BHA.

SERVICE. PICK - UP 3-1/2" DRILL PIPE. KELLY - UP, TAG DV TOOL @ 2884'. DRILL DV AND 10' OF CEMENT. TIH TO 3287'

D.O. CMT, FLOAT COLLAR & SHOE.

CIRCULATE. TOOH.

PU HAMMER BIT & TEST. TIH. UNLOAD HOLE @ 1566' TIH - 3465' UNLOAD HOLE @ 3465'.

REPORT DATE: 4/25/2003

MD : 5,400 CC: \$0

TVD : º

DAYS:

MW:

VISC:

DAILY: DC: \$28,942

TC: \$28,942

CUM: DC: \$255,996

CC: \$0

TC: \$255,996

DAILY DETAILS: BLOW HOLE DRY @ 3465'. DRILLED 6-1/4" HOLE FROM 3465' - 4712' 82.1'/HR

RIG SERVICE.

DRILLED 6-1/4" HOLE FROM 4712' - 5182' 72.3'/HR. RIG SERVICE.

DRILLED 6-1/4" HOLE

FROM 5182' - 5400 72.66'/HR.

REPORT DATE: 4/26/2003

MD: 5,860

TVD: 0

DAYS:

MW:

VISC:

DAILY: DC: \$47,219

CC: \$0

TC: \$47,219

CUM: DC: \$303,215

CC: \$0

TC: \$303,215

DAILY DETAILS: DRILLING 6-1/4" HOLE FROM 5400' TO 5860' 87.6'/HR. BLOW HOLE CLEAN. TOOH FOR LOGS. SAFETY METTING, RIG-UP LOGGERS (HALLIBURTON). LOG WELL, (HRI, HRT, DENSITY SPACED NUETRON DEEP RESITIVITY) LOGGERS TD 5859'. RIG DOWN LOGGERS. RIG-UP CSG CREW, PICK-UP 4-1/2", 10.5#, K-55, ST&C LINNER - TOTAL LENGTH 2564.47' & HANGER. RIG DOWN CSG CREW. TIH W/ DRILL PIPE & LINER, TAG @ 5860' BLOW DRILL PIPE, HANGER, LINER SET LINER, SAFETY MEETING, RIG-UP HALLIBURTON. AND ANNULAS W/ AIR. CMT LINER (5860' - 3281') W/ 285 SKS OF 50/50 B POZ CMT. DISPLACED CMT W/ 64 BBLS WTR. BUMPED PLUG @ 923 PSIG - OK. CIRCULATE 7" INTERMEDIATE VOLUME ON TOP OF LINER. RECOVER

16 BBLS OF CMT. LDDP.

REPORT DATE: 4/27/2003 MD: 5,860

TVD : Q

DAYS:

MW:

VISC:

DAILY: DC: \$14,784

CC: \$0

TC: \$14,784

CUM: DC: \$317,999

CC: <u>\$0</u>

TC: \$317,999

DAILY DETAILS: LDDP & DC'S.

4/26/03.

N/D BOP'S CAP WELL.

RIG RELEASE @ 12:00 HRS.

DAILY: DC:

REPORT DATE: 4/28/2003 MD: 5.860

CC:

TVD : **Q** TC:

DAYS:

CUM: DC: \$317,999

CUM: DC: \$317,999

CUM: DC: \$317,999

MW:

CC: \$0

CC: \$0

CC: \$0

VISC: TC: \$317,999

DAILY DETAILS: WOCT.

REPORT DATE: 4/29/2003

DAILY: DC:

DAILY: DC:

MD: 5,860

CC:

TVD : º TC:

DAYS:

MW:

VISC:

TC: \$317,999

TC: \$317,999

DAILY DETAILS: WOCT.

REPORT DATE: 4/30/2003 MD: 5,860

CC:

TVD : 0 TC:

DAYS:

MW:

VISC:

DAILY DETAILS: WOCT.



WELL NAME: HORTON 2C

FIELD:

BLANCO MESA VERDE

COUNTY & STATE: SAN JUAN

WI%: 25.00000 AFE#:

, NM API#: 03-045-31435

CONTRACTOR: KEY

PLAN DEPTH: <u>5,250</u>

SPUD DATE: 4/14/2003

DHC:

CWC:

AFE TOTAL:

FORMATION:

DISTRICT:

LOCATION:

MESAVERDE

REPORT DATE: 5/1/2003 DAILY: DC: \$0

MD : <u>5,860</u> TVD : 0

DAYS : 0

MW:

VISC:

CC: \$1,411

TC: \$1,411 CUM: DC: \$317,999 CC: \$1,411

NESE SEC. 22, T32N, R11W

TC: \$319,410

DAILY DETAILS: ROAD RIG TO LOCATION. RUSU, NDWH, NHBOP. SPOT IN RIG PUMP & TANK. SPOT IN 4-400

BBL FRAC TANKS. RUN LINES FROM PUMP TO TANKS & WELL. TRAVEL.

REPORT DATE: 5/2/2003

MD: 5,860

CC:

TVD : º TC:

DAYS:

CUM: DC: \$317,999

MW:

VISC:

DAILY: DC: DAILY DETAILS: WOCT.

REPORT DATE: 5/3/2003

MD: 5,860

TVD: 0

DAYS:

CC: \$1,411

CC: <u>\$1,411</u>

CC: \$1,411

TC: \$319,410

TC: \$319,410

DAILY: DC:

CC:

TC:

CUM: DC: \$317,999

MW:

VISC:

DAILY DETAILS: WOCT.

DAILY DETAILS: WOCT.

REPORT DATE: 5/4/2003

MD: 5,860 CC:

TVD : 0 TC:

DAYS:

MW:

VISC:

DAILY: DC:

REPORT DATE: 5/5/2003

MD : <u>5,860</u>

TVD : º

DAYS:

MW:

VISC:

DAILY: DC: \$0

CC: \$6,642

TC: \$6,642

CUM: DC: \$317,999

CUM: DC: \$317,999

CC: \$8,053

TC: \$326,052

TC: \$319,410

DAILY DETAILS: TRAVEL.

SPOT IN FLOW BACK TANK. SPOT IN FLOAT W/ 2-3/8" TBG. POCK UP AND TIH W/ 6-1/4" BIT, 4 DRILL COLLARS AND 102 JTS TBG TAG LT AT 3282. TOH. TIH W/ 3-7/8" BIT, COLLARS AND 181 JTS 2-3/8" TBG. TAG CMT @ 5732'. 102' BELOW BOTTOM PERF. RU PUMP. CIRC 170 BBLS OF 2% KCL W/ BIOCIDE. LAY DOWN 21 JTS TBG TOH W/ 80 STDS TBG & COLLARS, CHANGE OUT PIPE RAMS ON BOP. SWIFN. TRAVEL. NOTE: SCHLUMBERGER UNAVAILABLE UNTIL FRIDAY. WILL RUN LOGS. PRESSURE TEST, PERFORATE AND RUN ACID BREAK DOWN

ON LOWER ZONE THURSDAY. START FRAC FRIDAY MORNING.

REPORT DATE: 5/6/2003 DAILY: DC:

MD: 5,860

CC:

TVD : 0 TC:

DAYS:

MW:

VISC: TC: \$326,052

DAILY DETAILS: WO FRAC. SHOULD FRAC ON FRIDAY (5-9-03)

REPORT DATE: 5/7/2003 DAILY: DC:

MD: 5,860

TVD : 0 TC:

DAYS:

MW:

VISC:

DAILY DETAILS: WO FRAC.

CC:

CUM: DC: \$317,999

CUM: DC: \$317,999

CC: \$8,053

CC: \$8,053

TC: \$326,052

PERCY

WELL CHRONOLOGY REPORT

REPORT DATE: 5/8/2003

MD: 5,860

TVD : 0

DAYS:

MW:

VISC:

DAILY: DC: \$0

CC: \$10,240

TC: \$10,240

CUM: DC: \$317,999

CC: \$18,293

TC: \$336,292

DAILY DETAILS: TRAVEL.

TRAVEL. CALL IN RU TRUCK. SHUFFLE EQUIP ON LOCATION TO MAKE ROOM FOR FRAC EQUIP. ADJUST PERFORATING GUNS. TIH W/ WIRE LINE TOOLS. TAG PBTD 5732', RUN STRIP TO GET ON DEPTH W/ SDL LOG. PRESS CSG TO 500 PSI. RUN GR, CBL & CCL TO LINER TOP 3282'. CEMENT TOP AT 3372'. BOND GOOD. TOH. INSTALL TREE SAVER. PRESSURE TEST CSG TO 3500 PSI FOR 15 MIN. HELD SOLID TIH W/ GUNS. PERFORATE LINER ZONE FROM 5630' TO 5370'. TOH, ALL GUNS FIRED. RD LUBRICATOR SWIFN. TRAVEL.

REPORT DATE: 5/9/2003

MD: 5,860

TVD : 0

DAYS:

MW:

VISC:

DAILY: DC: \$0

CC: \$145,636

TC: \$145,636

CUM: DC: \$317,999

CC: \$163,929

TC: \$481,928

DAILY DETAILS: TRAVEL.

RU SCHLUMBERGER. HOLD SAFETY MEETING. PRESSURE TEST LINES TO 4500 PSI. OPEN TREE SAVER. PUMP FIRST STAGE FRAC PER PROCEDURES. MAX PRESS 3044. AVERAGE PRESS 1799. RU WIRELINE, TIH W/ HALLIBURTON COMPOSITE PLUG & GUN. RUN STRIP AT LINER TOP TO GET ON DEPTH. ATTEMPT TO RUN PLUG TO 3330'. COULD NOT GET DOWN. GUN & PLUG HANGING UP IN SAND. PULL ABOVE LT. PUMP 200 BBLS ATTEMPTING TO CATCH PRESS. COULD NOT. TIH SET PLUG AT 5330'. ATTEMPT TO PULL UP. GUN STUCK. DOCK WIRE LINE 20 MIN PULL FRAC. PRESSURE TEST PLUG TO 3500' PSI. HOLD. RE RUN STRIP TO GET ON DEPTH. PERFORATE FROM 5310' TO 5066'. TOH. FRAC 2ND STAGE PER PROCEDURES. MAY PRESS 3528 PSI AVERAGE PRESS 1046 PSI. RU WIRELINE. TIH W/ 2ND COMPOSITE PLUG & GUN. RUN STRIP AT LT TO GET ON DEPTH. TIH TO 5030'. RUN STRIP TO VERIFY DEPTH. SET PLUG AT 5030'. PRESS TEST PLUG TO 3500. HOLD. PERFORATE 3RD STAGE FROM 4988' TO 4613'. TOH. RD WIRELINE. FRAC 3RD STAGE PER PROCEDURE. MAX PRESS 2664 PSI AVERAGE TREATING PRESS 1628 PSI. 5 MINUTE SHUT IN AT 900 PSI. RD SCHLUMBERGER RU CHK MANIFOLD & RUN FLOW BACK LINES TO TANK. OPEN TO FLOW AT 7:20 P.M. 700 PSI ON WELL AT 20/64 CHK. RELEASE RIG CREW.

TRAVEL.

REPORT DATE: 5/12/2003 MD: 5,860

5.860

TVD : 0

DAYS:

MW:

VISC:

DAILY: DC: \$0

CC: \$14,411

TC: \$14,411

PRESS; 690, GAUGE; 4'-1", LOTS OF FOAM, CHK; 20/64.

CUM: DC: \$317,999

CC: \$178,340

TC: \$496,339

DAILY DETAILS: TRAVEL.

TRAVEL. RU 4" BLEWY LINE. FOUND 1 JT TO THIN TO RUN. CALL FOR REPLACEMENT JT. BLOW WELL DOWN TO 400 PSI THRU CHK MANIFOLD WHILE WAITING. PUMP 84 BBLS 2% KCL DOWN CSG. TIH W/ 3-7/8" BIT, PUMP OFF SUB AND 19 STDS TBG. WELL UNLOADED. PUMP 7 BBLS DOWN TBG. TIH W/ 17 STD. PUMP 11 BBLS. TIH W/ 44 STDS. TAG AT 4949.47. 80' ABOVE COMPOSITE PLUG. TBG DRAGGING WHEN PULLING ABOVE TAG. PUMP 20 BBLS DOWN TBG. RU POWER SWIVEL. CIRC WELL W/ AIR FOAM. ATTEMPT TO DRILL. BIT HANGING UP. WORK TO DRILL THRU FOR 45 MIN. WELL FLOWING TO HARD TO TOH SAFELY. LAY DOWN 14 JTS. SET TBG IN SLIPS AND CLOSE PIPE RAMS W/ BOTTOM OF STING AT 4575'. 38' ABOVE TOP PERF. FLOW WELL OVER NIGHT TO PULL DOWN PRESSURE. TRAVEL. PRESS; 700, GAUGE; 0'-7", BBLS; 0, CUMM; 0, CKH; 24/64. PRESS; 730, GAUGE; 4'-1", BBLS; 3.37, CUMM; 353.26, CHK; 20/64. PRESS; 730, GAUGE; 3'-6", BBL; 3.23, CUMM; 401.48, CHK; 20/64.

REPORT DATE: 5/13/2003

MD : <u>5,860</u>

TVD : ⁰

DAYS:

MW:

VISC:

DAILY: DC: \$0

CC: \$27,363

TC: \$27,363

CUM: DC: \$317,999

CC: \$205,703

TC: \$523,702

DAILY DETAILS: TRAVEL.

TRAVEL. RUN GAS ANALYSIS ON WELL. 2.5% N2, 1.5% CO2. PUMP 14 BBLS 2% KCL DOWN TBG. NU TBG HANGER, TIW & SUB. PUMP 70 BBLS 2% DOWN CSG. LAND TBG HANGERS 143 JTS 2-3/8" TBG (4528.50'), SN (1.10'), 1 JT 2-3/8" TBG (31.18'), PUMP OFF SUB AND BIT (2.40') PLUS 12' KB. BOTTOM OF TBG AT 4575.18' KB. 38' ABOVE TOP PERF. ND 4" BLOW SPOOL, BLEW LINE & BOP. PUMP ANOTHER 14 BBLS DOWN TBG. PULL TIW & SUB, NUWH. 2" NIPPLE W/ 2" BALL VALVE ON TBG HEAD STARTED LEAKING WHEN BREAKING UNIONS OFF CSG FLOW LINE. POSSIBLE CRACKED THREADS. CALL FOR TOOLS TO REMOVE THREADS. PUMP 70 BBLS 2% DOWN CSG. PULL NIPPLE & REPLACE S/ DOUBLE X HEAVY NIPPLE. FLOW 60 BBLS FLUID UP TBG. RDSU. MOVE ALL EQUIPMENT OFF LOCATION. WILL FLOW WELL UNTIL PRESSURE

DROPS TO CONTROLLABLE LEVEL. TRAVEL.

REPORT DATE: 5/14/2003

MD: 5,860

TVD : 0

DAYS:

MW:

VISC:

DAILY: DC:

CC:

TC:

CUM: DC: \$317,999

CC: \$205,703

TC: \$523,702

DAILY DETAILS: TURNED OPERATIONS OVER TO HALLADOR. WOP & PIPELINE.