				· · · · · · · · · · · · · · · · · · ·	
RECEIVED:	2018	REVIEWER: MAM	DHC	APP NO: DMAMISID	157057
,	12	- Geological	ABOVE THIS TABLE FOR OCD DIVISION USE OIL CONSERVATION & Engineering Bure cis Drive, Santa Fe,	<b>N DIVISION</b> eau –	
			RE PROCESSING AT THE DIVISIO		BION ROLES AND
Applicant:_	Hilcorp Energy	Company		OGRID N	umber:
Well Name:	San Juan 29-	-7 Unit 80B		API: 30-0	39-27021
Pool: Blanco	Pictured Cliffs			Pool Cod	e: 72359
<ol> <li>1) TYPE OF . A. Loc</li> <li>B. Che [1] [11]</li> <li>2) NOTIFIC/ A. □ C B. □ F C.□ / D.□ T F. □ S</li> </ol>	APPLICATION ation – Space NSL eck one only Comminglin Injection – I WFX ATION REQUI Offset opera Royalty, over Application of Notification of Surface own	I N: Check those wh ing Unit – Simultan NSP (PROJEC of for [1] or [11] ig – Storage – Mea CTB PLC Disposal – Pressure PMX SWD RED TO: Check that tors or lease holder rriding royalty owner requires published and/or concurrent and/or concurrent er	NDICATED BELOW ich apply for [A] eous Dedication surement PC OLS Increase – Enhanced IPI EOR ose which apply. rs ers, revenue owners notice approval by SLO	ATION UNIT) SD	FOR OCD ONLY Notice Complete Application Content Complete
	or all of the	•	otification or publica	tion is attached,	and/or,

3) CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Kandis Roland

Print or Type Name

analis folana

<u>4/27/2018</u> Date

505-324-5149

Phone Number

kroland@hilcorp.com e-mail Address District I 1625 N. French Drive, Hobbs, NM 88240 District II 811 S. First St., Artesia, NM 88210

District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV

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

#### State of New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Dr.

Form C-107A Revised August 1, 2011

APPLICATION TYPE Single Well Establish Pre-Approved Pools EXISTING WELLBORE <u>X</u>Yes No

## APPLICATION FOR DOWNHOLE COMMINGLING

Santa Fe, New Mexico 87505

**Oil Conservation Division** 

Hilcorp Energy Company Operator		PO Box 4700, Farmington NM 87499 Address	
SAN JUAN 29-7 UNIT	<u>80B</u>	UNIT E-9-29N-07W	Rio Arriba
Lease	Well No.	Unit Letter-Section-Township-Range	County

OGRID No. <u>372171</u> Property Code <u>318713</u> API No. <u>30-039-27021</u> Lease Type: <u>X</u> Federal State Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	BLANCO PICTURED CLIFFS	BLANCO MESAVERDE	BASIN DAKOTA
Pool Code	72359	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2930' - 3070' estimated	3948' - 5358'	7210' – 7414'
Method of Production (Flowing or Artificial Lift)	New Zone	Artificial Lift	Artificial Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	997 psi	705 psi	3172 psi
Oil Gravity or Gas BTU (Degree API or Gas BTU)	BTU 1000	BTU 1000	BTU 1000
Producing, Shut-In or New Zone	NEW ZONE	PRODUCING	PRODUCING
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data )	Date: N/A Rates: N/A	Date: Feb 2018 Rates: 4374 mcf 15 bbls oil 16 bbls water	Date: Feb 2018 Rates: 897 mcf 3 bbls oil 15 bbls water
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or	Oil Gas	Oil Gas	Oil Gas
explanation will be required )	Will be supplied upon completion	Will be supplied upon completion	Will be supplied upon completion

### ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones? If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?	Yes Yes	No <u>X</u> No <u>X</u>
Are all produced fluids from all commingled zones compatible with each other?	Yes_X	No
Will commingling decrease the value of production?	Yes	No_X
If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application?	Yes <u>X</u>	No
NMOCD Reference Case No. applicable to this well: <u>R-10697 – DHC exemption to notify interest owners</u>		

#### Attachments:

C-102 for each zone to be commingled showing its spacing unit and acreage dedication. Production curve for each zone for at least one year. (If not available, attach explanation.) For zones with no production history, estimated production rates and supporting data. Data to support allocation method or formula. Notification list of working, royalty and overriding royalty interests for uncommon interest cases. Any additional statements, data or documents required to support commingling.

#### PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools List of all operators within the proposed Pre-Approved Pools Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application. Bottomhole pressure data

. 1

I hereby certify that the information above) is true and complete to the best of my knowledge and belief. 1

SIGNATURE Analy Colland TITLE Operations/Regulatory Technician D	<b></b> ΥΤΕ_	
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4/27/18

TYPE OR PRINT NAME Kandis Roland

1 1

TELEPHONE NO. (505) 324-5149

E-MAIL ADDRESS kroland@hilcorp.com

OCD Permitting

Form C-102 August 1, 2011

Permit 251652

 District I

 1625 N. French Dr., Hobbs, NM 88240

 Phone: (575) 393-6161 Fax: (575) 393-0720

 District II

 811 S. First St., Artesia, NM 88210

 Phone: (575) 748-1283

 Phone: (575) 748-1283

 Fax: (575) 748-9720

 District III

 1000 Rio Brazos Rd., Aztec, NM 87410

 Phone: (505) 334-6178

 Pax: (505) 334-6170

 District IV

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

 Phone: (505) 476-3470 Fax: (505) 476-3462

# State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-039		2. Pool Code 72359				3. Poc	BLAN		) CLIF	FS (GAS)		
4. Property Co 31	<sup>de</sup> 8713	5. Property Name SAN JU	AN 29 7 UNIT			6. We	II No. 080B					
7. OGRID No. 372	2171	8. Operator Name HILCOF		OMPANY		9. Elev	vation 6136			u 114		
				10.	Surface	Locati	ion					
UL - Lot	Sectio	n Township	Range	Lot Idn	Feet F	From	N/S Line	Feet From	ΕΛ	N Line	County	
E	9	29N	07W		154	40	N	10	55	W		RIO ARRIBA
	_		11. Botto	m Hole Loc	ation If C	Differer	nt From Su	Irface				

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated A 320.(	cres )0 W/2		13. Joint or Infill		14. Consolidation	n Code		15. Order No.	

#### NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NONSTANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

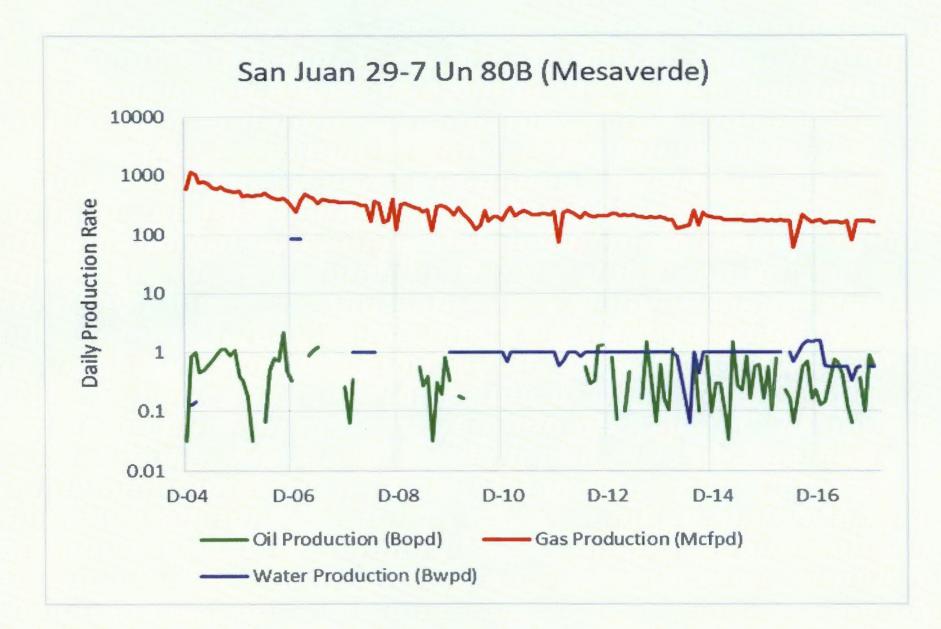
	OPERATOR CERTIFICATION         I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.         E-Signed By:       Camadu )         Title:       Operations/Regulatory Technician         Date:       4/27/18
And a second and a second a se	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.
	Surveyed By: Roy A Rush
	Date of Survey: 7/25/2001 Certificate Number: 8894

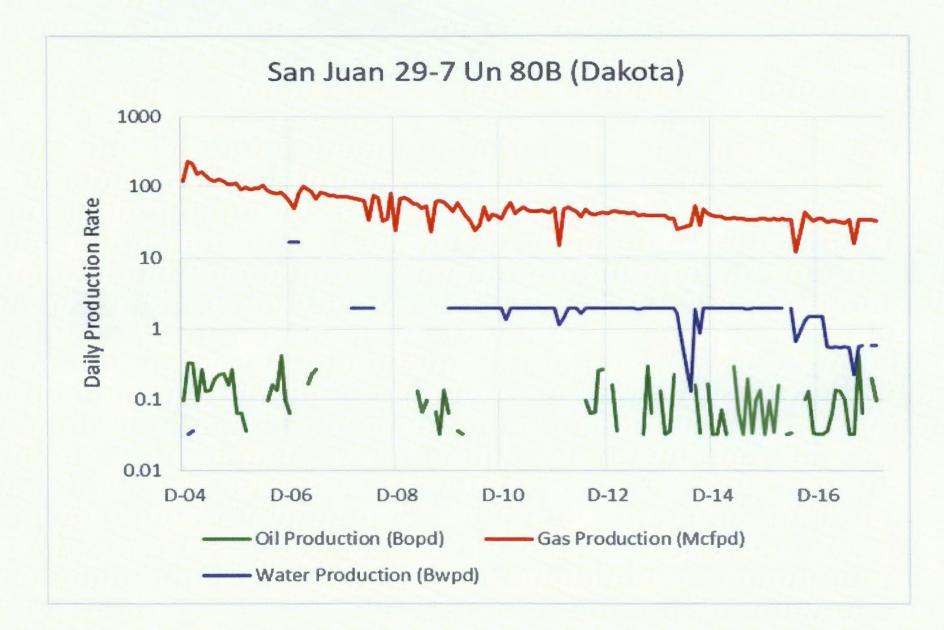
ISTRICT I 2.0. Box 1980, Hob 2.0. Drawer DD, Ar DISTRICT III 1000 Rio Brazos Ra DISTRICT IV PC Box 2088, Sant	iusia, H.M. i., Aziec, I o Fe, NM I	88211-0719 N.H. 87410 87504-2088	WELL L	orgy, Mino OIL C S OCATIO	rais & Na CONSERV P.O. anta Fe, 1	ATIC Box 2 NM 87	Mexico Resources Depart N DIVISION 2088 2504-2088 REAGE DEDI	Subr	nit to Ap S LAT	Instru propriate itate Lea Fee Lea	Form C-102 uary 21, 1994 cilons on back District Office se - 4 Copies se - 3 Copies DED REPORT
'API 30-039-	Number 77	150		<sup>2</sup> Pool Code 9/71599		<b>D1</b> a		<sup>3</sup> Pool Nam	•	•	
<sup>4</sup> Property Coc	•	001	17251			perty No		e <u>/basin_Da</u>	KOTA	• ₩	di Number
· ,7465					SAN JUAN	29-	7 UNIT				80B
OGRID No.						rator N				1	Elevation C 1 3 R
14538							OIL & GAS INC	•			6136
<u></u>	·						Location				
UL or tot no. E	Section 9	Township 29-N	Ronge 7W	Lot Idn	Feet from 1540	the	North/South line NORTH	Feet from the	East/We WES		RIO ARRIBA
		1	11 Both	om Hole		on li					11.0
UL or lot no.	Section	Township	Range	Loi idn	Feet from		North/South line	Feet from the	East/W	est line	County
" MV-W/ 320	5	ш. Ц	Joint or Infil		<sup>14</sup> Consolida	tion Co	de	<sup>10</sup> Order No.			
DK-W/320	)	· .									
0003 W 640'(R) 	1540' 2	NDELARIA, PAE	BLO, ET UX					true and cos	npinte to the	band of my k	nowledge and belief
[z N		257	-					Stignothin <u>Peggv</u> Printed		lo	<u></u>
li	1100,	LAT: 36	44.6' N.	. 11						-	
1	=	LONG:10	7 34.9' W	·				THe	atory_	Superv	1sor
		<u>  </u>		9			·	Date	26-0	01	·
FD 2 1/2" GLO 1914 BRASS CAP								I hereby ci vás plotted or unider r	ertify that th from field in my supervisio the best of -25-	notes of act motes of act m, and that	RTIFICATION for shown on this p us surveys made by the same is true a
	NMSF-	078423			<u>.</u> € 	χι ξ		Signature		NH SO	

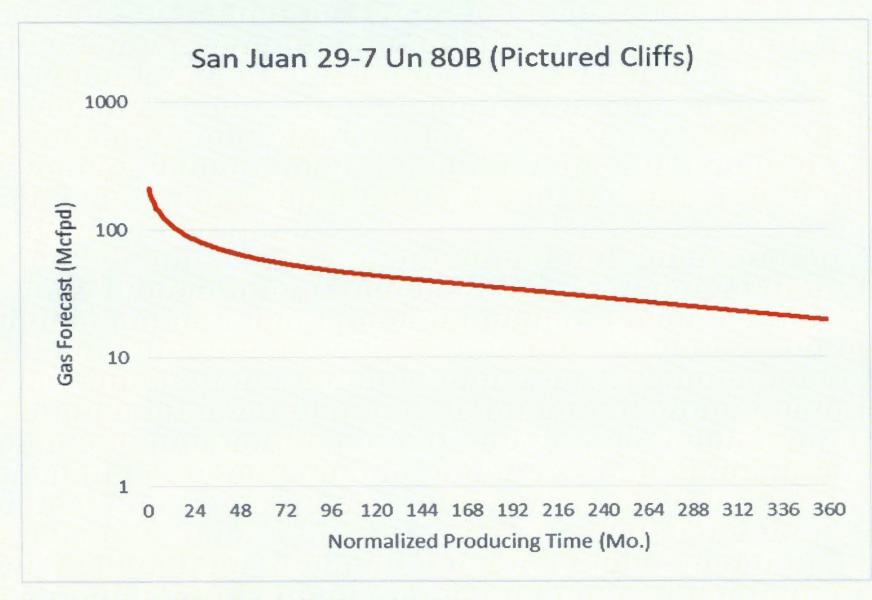
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San Juan 29-7 Unit 80B - Production Allocation Method

Production for the downhole commingle will be allocated using the subtraction method in agreement with the BLM. The base formation is the Mesaverde and Dakota the added formation to be commingled is the Pictured Cliffs. The subtraction method applies an average monthly production forecast to the base formations using historic production. All production from this well exceeding the forecast will be allocated to the new formation. After 3 years production will stabilize. A production average will be gathered during the 4<sup>th</sup> year and will be utilized to create a fixed percentage based allocation. Oil production will be allocated based on average formation yields from offset wells. All documentation will be submitted to the Aztec NMOCD office.







The forecast for Pictured Cliffs production has been generated using a type curve of PC gas production in the surrounding production trend.

il Hile	orp Ener	gy Company	Current Scl	hematic		
	ne: SA	N JUAN 29-7 UNIT #80E				
PH UM 3003927021	I	Surface Legal Location 009-029N-007W-E	Field Name Ucar BLANCOMERAVERDE (PRORATED GAS	se No.	StateProvince NEW MEXICO	Well Configuration Type VERTICAL
Found Elevation	(11)	Original KBRT Elevation (1)	KB-Ground Olistance (1)	KB-Casing Flang	e Distance (11) KB-Tubing	Hanger Distance (1)
6,136.00		6,151.00	(15.00			
			/ERTICAL, Original Hole, 4/	23/2018 3:29:20 P	м	
MD (ffKB)	TVD (ftKB)		Vertica	schematic (actual)		
15.1	15.1	- 1; Surface; 9 5/8 in; 9.00 in			LINAAAA MATANA GULANA AAAA	a sa di kan Taduka di kana afiki dan Tan Maluli Anton Ann
59.4	15.1 59.4	JTS OF 9 5/8" - 32.30# - CASING W/A SAW TO BOTTOM, CASING LENGT	DTH COLLAR ON		SINGLE STAGE: 1	15.0-231.9; 10/31/2004;
231.0	76.4 231.0	@ 231.87, RAN THREE			BBLS TO SURFAC	
	232.0	DFW String Key = 2; Intermediate1; 7 in; 6.46			CEMENT STAGE	
1,953.1	1,952.9 2,122.8	74 JTS OF 7"" - 20# - J55	- 8RD ST&C CSG 🎇		CIRCULATING 55	BBLS TO SURFACE
2,250.0	2,249.7	W/AWEATHERFORD BOTTOM, AFLOAT COL		100		
	2,360.6	BOTTOM & A HYDRAULIC		<b>2</b>		
2,363.8	2,363.6	19 JTS OFF B	OTTOM, BROKE 🏼 🎆		FIRST STAGE 2	360.8-3,180.4; 11/2/2004;
	2,647.6	<ul> <li>CIRCULATION @ 131', 8</li> <li>LAST 5 JTS TO 3190', RAN</li> </ul>			CEMENT STAGE	1 WITH 159 SX
2,928.1	2,927.8	AS PER PROCEDURE, PI	CK UP MANDREL ]		CIRCULATING 20	BBLS TO SURFACE
3,135.2	3,067.5 3,134.8	& LAND 7 <sup></sup> CSG, CSG LE	NGTH = 3165.43',			
0,100.2	3,135.8	FLOAT SHOE SET @ FLOAT COLLAR @ 3135.24		劉巖		
3,179.5	3,179.1	COLLAR SET @ 2360.76	5, TURBOLIZERS			
	3,180.1	SET	r @ 2145' & 2102'.	See.		
3, 190.0	3,189.5	DFW String Key = 80	8YM: 3.180.4 ftKB	1000000		
	3,687.5	TUBING; 2 3/8 in; 4.70 lb				
3,908.1	3,907.7		7,278.8 ftKB		FOAM-N2: 11/19/2	2004; FRAC LEWIS WITH
4,330.1	3,947.7 4,329.5	PERF LEWIS; 3,948.0-4	330.0; 11/18/2004			EAR GEL AND 200000#
4,330.1	4,329.5		14		20/40 BRADY SAM	
4,535.4	4,534.9				FOAM-N2; 11/18/2 CLIFFHOUSE/ME	NEFEE WITH 1165 BBLS
	4,544.7			200	SLICKWATER AN	D 100000# 20/40 ARIZONA
4,652.9	4,652.3	-MPERF CLIFFHOUSE/M	ENEFEE; 4,472.0-	208		7 440 0: 11 (5/2004)
	4,762.5	-MENEREE (IIIIai)		265	SINGLE; 2,250.0-7	11 SX TOC DETERMINED
4,842.8	4,842.3		305	60	BY CBL	
	4,935.4	PERF POINT LOOKOU	1: 4.936.0-5.358.0			2004; FRAC POINT
5,123.0	5,122.4	-M 210 / 0111 200100	11/18/2004	秘		1186 BBLS SLICKWATER - 40 ARIZONA SAND
5,523.9	5,357.3 5,523.3	-MANCO	3; 7,210.0-7,298.0;		AND 10000# 201-	
3,523.5	6,397.2		11/18/2004	<u></u>		
7,003.6	7,002.8	PUP JOINT; 2 3/8 in; 4.70	ftKB: 7,280.9 ftKB	88		
	7,012.9	TUBING; 2 3/8 in; 4.70				
7,132.9	7,132.0	—GF	ftKB; 7,311.9 ftKB			
	7,187.1	-GR SEATING NIPPLE; 2 3		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
7,210.0	7,209.1	TA EXPENDABLE CHECK	7,312.7 ftKB	835		
	7,247.1	TW EAFENDABLE ONCO	ftKB; 7,313.5 ftKB	98		
7,278.9	7,278.0 7,280.0	PERF DAKOTA	3; 7,315.0-7,394.0;			
7,297.9	7,295.0	3; Production 1; 4 1/2 in;	4 05 in: 15 0 fKB	- 765	SUCKMATED 44	18/2004; FRAC DAKOTA
	7,311.1	RAN 174 JTS 4 1/2" - 1	0.5# - J55 - 8RD			SLICKWATER AND 40000#
7,312.7	7,311.8	ST&C CSG W/ A WEATH	ERFORD FLOAT	5	20/40 SAND	
	7,312.4	SHOE & FLOAT COLLAR V BOTTOM, TAG @ 741	S' CLEAN OUT F/			
7,315.0	7,314.1	7416' TO 7443', BLOW W	ELL CLEAN, CSG	288		
3 3 3 6 4	7,347.2	LENGTH = 7425.22'		201	Web	
7,378.0	7,377.1	<ul> <li>7003.81' - 7013.94' &amp; 4535.</li> <li>MANDREL, &amp; LAND CSG</li> </ul>		121	14	
7,414.0	7,393.1 7,413.1	7440.22', TOP OF F	LOAT COLLAR @	120		
1, 114.0	7,422.0	7438.52', RAN CENTR	ALIZERS AS PER	×		
7,438.3	7,437.4		PROG.			
	7,438.1	DFW String Key = KN	IAVC; 7,440.0 ftKB			
7,440.0	7,439.0		PBTD; 7,440.0		PLUGBACK, 7,440	0.0-7,443.0; 11/7/2004
	7,442.0		×			

<b>Hik</b>	огр Еве	rgy Company	Cur	rent Schem	atic		
Well Nat	me: 5	AN JUAN 29-7 UNIT #80	Field Name	Lisense Na.		SizeProvince	V/#8 Configuration Type
300392702 Round Elevation		009-029N-007W-E	BLANCOMES WERDE FRO		KS-Case A	NEW MEXICO	VERTICAL
5,136.00	·········	6,151.00	16.00				
			VERTICAL, Origina	al Hole, 4/23/20	018 3:29:20	PM	A.A.B.B.B.B.B.B.B.B.B.B.B.B.B.B.B.B.B.B
MD (ffKB)	TVD (ftKB)			Vertical sche	matic (actual)		
15.1	15.1 15.1	- 1; Surface; 9 5/8 in; 9.00 in JTS OF 9 5/8" - 32,30#					dia non onder stimmer order the lot of the sector of the
59.4	59.4 75.4	CASING W/A SAW TO BOTTOM, CASING LENGT 231.87, RAN THREE	H = 216.87", LAND				E 15.0-231.9; 10/31/2004; 1 274 SX CIRCULATING 18
231.0	231.0 232.0	DFW String Key =	\			6BLS TO SURI	FACE SE: 15.0-2,360.8; 11/2/2004;
1,953.1	1,552.9 2,122.8	2; Intermediate1; 7 in; 6.46 74 JTS OF 7" - 20# - J55	- 8RD ST&C CSG				55 BBLS TO SURFACE
2.250.0	2,249.7 2,350.6	W/AWEATHERFORD BOTTOM, AFLOAT COL BOTTOM & AHYDRAULIN	LAR ONE JT OFF				
2,353.8	2,363.5 2,547.5	19 JTS OFF I CIRCULATION @ 131', I	OTTOM , BROKE 315', 1640', 2493' &				2,360.8-3,180.4; 11/2/2004; E 1 WITH 159 SX
2,928.1	2,917.8 3,057.5	LAST 5 JTS TO 3190', RAJ AS PER PROCEDURE, P & LAND 7" CSG, CSG LI	CK UP MANDREL			CIRCULATING	20 BBLS TO SURFACE
3,135.2	8,134.8 2,135.8	FLOAT SHOE SET @ FLOAT COLLAR @ 3135.24	3180.43°, TOP OF			2,47	red Clubs Perfs
3,179.5	3,130.1	COLLAR SET @ 2360.7 SE	6", TURBOLIZERS   T @ 2145' & 2102'.				
3,190.0	3.129.5 3.687.5	DFW String Key = 8 TUBING; 2 3/8 in; 4.70 Ib					
3,908.1	3,907.7 3,947.7	PERF LEWIS: 3.948.0-4	7,278.8 ftKB				9/2004; FRAC LEWIS WITH JNEAR GEL AND 200000#
4,330.1	4,529.5 4,471.6	<u></u>				20/40 BRADY S FOAM-N2; 11/1	AND 8/2004; FRAC
4,535.4 4,652.9	4,534.9 4,544.7		ENEFEE: 4.472 D-1				MENEFEE WITH 1165 BBLS IND 100000# 20/40 ARIZONA
4,652.9	4,552.5 4,7 <u>67.</u> 5		,843.0; 11/18/2004			SINGLE; 2,250.	0-7,440.0; 11/6/2004; I 311 SX, TOC DETERMINED
5,123.0	4,842.5 4,935.0 5,322.4		T; 4,936.0-5,358.0,				8/2004; FRAC POINT
5.523.9	5,357.3 5,357.3		11/18/2004 3; 7,210.0-7,298.0;				"H 1186 BBLS SLICKWATER- @40 ARIZONA SAND
7,003.6	5,397.1 7,002.5	PUP JOINT; 2 3/8 in; 4.70	11/18/2004		<b>1</b>	~~~~~~	
7,132.9	7,012.9	L	fikB; 7,280.9 fikB Ib/fi; J-55; 7,280.9 fikB; 7,311.9 fikB				· · ·
7,210.0	7,187.1 7,209.1	-GR SEATING NIPPLE; 2 3	/8 in; 7,311.9 ftKB; 7,312.7 ftKB				
7,278.9	7,247.1 7,272.0	-TWEXPENDABLE CHECK	C 2 3/8 in: 7,312.7 ffKB; 7,313.5 ffKB 7,315.0-7,394.0;				······
7,297.9	7,250.0 7,257.0	3; Production 1; 4 1/2 in;	11/16/2004			SLICKWATER	11/18/2004; FRAC DAKOTA
7,312.7	7,311,1 7,311,8	RÁN 174 JTS 4 1/2"" - 1 ST&C CSG W/ A WEATH SHOE & FLOAT COLLAR V	0.57 J55 SRD				S SLICKWATER AND 400004
7,316.0	7,312.4 7,314.1	BOTTOM, TAG @ 741 7416' TO 7443', BLOW W	5', CLEAN OUT F/			алан алан Ал	
7,378.0	7,247.2 7,277.1	<ul> <li>LENGTH = 7425.22'</li> <li>7003.81' - 7013.94' &amp; 4535.</li> <li>MANDREL, &amp; LAND CSG</li> </ul>	, Marker jts @—-1 59 - 4545.54', p:U ]—			······································	
7,414.0	7.353.† 7,213.1 7,432.3	7440.22, TOP OF F 7438.52', RAN CENTR	LOAT COLLAR 🙆	B			
7.438.3	7,435,1	 DFW String Key = K№	PROG.				-
7,440.0	7,439.0 7,442.0	Di ti Sung Key - Ki	PBTD; 7.440.0			PLUGBACK 7.4	40.0-7,443.0; 11/7/2004
	ton.com				-		