

Hanson Operating Co., Inc. Operator

Junction Federal #1 Well Name and No.

4 DST No

FLUID SAMPLES DURING JETTING

00:39 - 02:00	Drilling mud	
02:00	Water cut mud	52,000 ppm Cl.
02:30		57,000 ppm Cl.
03:00		57,000 ppm Cl.
03:30		55,000 ppm Cl.
04:00		51,000 ppm Cl.
04:30		54,000 ppm Cl.
05:00	Surface water	52,000 ppm Cl.
05:30		53,000 ppm Cl.
06:00		65,000 ppm Cl.
06:30		65,000 ppm Cl.

First part of recovery was jetted to reserve pit until it turned to water then it was turned to the test tank and 124 barrels was jetted.



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	TIME	CHOKE SIZE	SURFACE PRESSURE	FLOW RATE MCF/D	REMARKS	<u></u>
18:12 H 18:20 18:50	Hr. 0 Min 5 10 15 20 25 30	.25"	Good Bl 10.5 oz 5.0 psi 7.5 9.75 10.5 9.5	2	Opened tool; slid t Re-opened for flow Closed for shut-in	#1:
20:22	0 5 10 15		1.5 psi 0.75 Dead	L	Opened for flow #2:	. – .
23:30 00:39 02:00 04:30 06:30 08:27 09:58 11:15 12:45 16:00					Start in with coile Jet mud to reserve Water cut mud to su Sulfur water to sur Start out with coil Closed for shut-in Unset packers; jarr Start out of hole: Reversed out recove Out of hole:	<pre>pit: rface: eface: ed tubing: #2: red tools:</pre>



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SAMPLER REPORT

Company		son Operating	Co., Inc.	Date	3/18/93	
Well Name & No. Junction Federal #1 County Roosevelt			Ticket No	258-79730		
est Interval		0'- 11935'		DST No	4	
Pressure in San		55	······································			·····
Total Volume of San	npler:	2600				
Total Volume of Sai	mple:	2550				
	Oil:	None				
W	Vater:	2550				
	Mud:	None				
	Gas:	0.01				
o)ther:	None				
			3 @ Res Ter	np/65,000 ppm Cl. t	citrated.	<u>. </u>
			Resistiv			
Make Up Water		0				
Make Up Water		.071@		°F of Chloride Conten	t 82,000	ppm.
Mud Pit Sample		.071	60	•F of Chloride Conten	82,000 t	ppm.
Mud Pit Sample		.071	60 Gravity	°F of Chloride Conten	82,000 t	ppm.
Mud Pit Sample		.071@	60 Gravity	•F of Chloride Conten	82,000 t	ppm.
Mud Pit Sample Gas/Oil Ratio Where was sample di		.071@	60 Gravity	•F of Chloride Conten	82,000 t	ppm.
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Mud Pit Sample Gas/Oil Ratio Where was sample di		.071@	60 Gravity	•F of Chloride Conten	82,000 t	ppm.







Shut-in #2

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Hanson Operating Co., Inc. Operator

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Junction Federal #1 Well Name and No

All DST No

Hanson Operating Co., Inc. (5) Box 1515 Roswell NM 88202-1515

⁹ hone (303) 790-2705	SERVI	CETOOLS		·····		ness Drive East ood, CO 80112	
Rig No. 2 Spol. 1650' FSL & 1650' FWL Sec. 17 Fwp. 8 S Rng. 37 E Field Wildcat County Roosevelt State New Mexico Elevation	Surface Choke Bottom Choke Hole Size Core Hole Size DP Size & Wt Wt. Pipe I.D. of DC Length of DC Total Depth Type Test Interval	3/4" 7 7/8" None 4 1/2" 4 1/2" 2 1/4" 736' 9480' Convent	16.60 20.00		9.4 39 .074(0 74,00 150.7 David Berry	<u>Sweeney</u> Fisher	<u>-</u> -
BI C E		K G	A Marine Contraction of the second se	Opened Tool Flow No. Shut-In No. Flow No. Shut-In No. Flow No. Shut-In No. Flow No. Shut-In No. Recorder Typ No. 011 Depth Inside Outside Initial Hydros Initial Flow Final Initial F Initial Shut-In Second Initial Second Shut Third Initial F Third Shut-In Third Shut-In	1 30 1 60 2 65 2 180 3 Non 3 " 90 Cap. 4 1 60 4 1 60 4 1 60 4 1 60 4 1 60 5 1 60 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7	30 min. 59 min. 66 min. 180 min. E Taken min. 8000 7500 psi 9425 feet Clock Range hrs. A 4694 K 4649 B 980 C 811	BOU

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	(samples sent to lab for analysis)
Gravity:	
Top:	47.0 Deg API @ 60 Deg F
Resistivity:	
Bottom:	.074 @ 60 Deg F/.03 @ Res Temp/74,000 ppm Cl. titrated.

DST #5 03-24-1993



Hanson	Operating	Co.,	Inc.	
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This analysis has been made on the basis of the liquid recovery and equations applicable to liquid recovery tests, the Horner extrapolation method and comparative log/log analysis.

The pressure extrapolation plot indicates a maximum initial reservoir pressure of 3475 psi and a maximum final reservoir pressure of 3434 psi which is equivalent to a subsurface pressure gradient of 0.364 psi/ft at gauge depth. The difference between the extrapolated initial and final reservoir pressures (41 psi) is not considered significant. The character of the build-up curves on the semi-log plots indicates the presence of double porosity within the tested interval.

The Average Production Rate which was used in this analysis, 468.0 barrels/day, has been calculated from analysis of the flow pressure curves using a liquid gradient for the recovered oil of 0.343 psi/ft.

For purposes of this analysis a Pay Thickness of 10 feet and an Average Porosity of 7% have been estimated.

The calculated Skin Factors indicate significant well-bore damage was present at the time of this formation test.

The evaluation criteria used in the drillstem test analysis system indicate this is a good mechanical test and the results obtained in this analysis should be reliable within reasonable limits relative to the assumptions which have been made.