

SID W RICHARDSON, INC  
PERRY FEDERAL NO 1

4-6-61 Perry Federal	1			Preparing to build location. Location: 2310' from the south line and 950' from the west line of section 23, Township 29 South, Range 33 East, Lea County, New Mexico. Ground level elevation 3615.2'.																					
4-7-61 Perry Federal	1			Will finish preparing location today. Preparing to move in Cactus Drilling Co. combination rotary and cable tool rig.																					
4-8-61 Perry Federal	1	4184		Location complete. Preparing to move in rig.																					
4-9-61 Perry Federal	1	4184		Rigging up Cactus Drilling Company combination rig. Will spud today.																					
4-10-61 Perry Federal (Cactus)	1	4184	675	Drilling, sand and shale. Finished rigging up Cactus Drilling Co. combination rig. Mixed 45 ex. gel, 3 ex. lime. Spudded 11" hole at 3:00 p.m., 4-9-61. 1/2" off at 600'. 1 day.																					
4-11-61 Perry Federal (Cactus)	1	4184	1135	Drilling, sand, with bit #2. Bit #1 made 962'. 1/4" off at 863'. 2 days.																					
4-12-61 Perry Federal (Cactus)	1	4184	1384	Sand and shale. Attempting to free stuck drill pipe. No report on bit #2. Bit #3, type not reported, made 249' in 11-1/2 hours. 1/4" off at 1050'. Started out of hole with bit #3 -- stuck drill pipe. Mud viscosity 32 sec. 3 days.																					
4-13-61 Perry Federal (Cactus)	1	4184	1611	Anhydrite. Preparing to run 8-5/8" OD surface casing. Finished drilling 11" surface hole to 1611' at 2:15 a.m., MST 4-13-61. 1/4" off at 1410. Bit #4, a Hughes OSCJ, made 231' in 16-1/2 hours. Added 7 ex. gel to the mud. Mud viscosity 35 sec. 4 days.																					
4-14-61 Perry Federal (Cactus)	1	4184	1611	TD. MOC. Elevation of KDB: 3619.0'. Ran 51 joints of 8-5/8" OD 24#/ft. J-55 casing, 1602.67', plus a float shoe 1.60'. Net length of casing string 1604.27'. Set top of 8-5/8" casing 3.90' below KDB. 8-5/8" OD casing set at 1608.17'. Ran one centralizer on bottom joint. Cemented with 700 ex. 50-50 Pozmix, 4% gel, followed by 100 ex. regular neat. Mixing time 28 minutes. Pumping time 26 minutes. Slurry weight 13.0#/gal. on Pozmix cement, 15.8#/gal. on regular neat. Plug down at 1:26 p.m., MST 4-13-61. Circulated out 200 ex. Left 30' cement inside casing. Maximum pressure 700 psi. 5 days.																					
4-15-61 Perry Federal (Cactus)	1	4184	1625	Drilling in salt. Tested casing to 1000 psi. Started drilling at 3:00 p.m., MST. Found top of cement plug at 1559'. (Bits #1, 2, 3 and 4 -- make not previously reported -- Hughes OSCJ bits). all 6 days.																					
4-16-61 Perry Federal (Cactus) (7 days)	1	4184	1780	Drilling in shale and anhydrite. 1/4" off at 1720. Drilling with cable tools. Original rotary KDB to cable tool derrick floor is 17". CTDp to ground level is 28".																					
4-17-61 Perry Federal (Cactus)	1	4184	1990	Drilling, salt. 3/4" off at 1907'. 8 days.																					
4-18-61 Perry Federal (Cactus)	1	4181	2185	Drilling, salt and anhydrite. 9 days.																					
4-19-61 Perry Federal (Cactus)	1	4184	2600	Drilling, salt and potash. 3/4" off at 2395'. 10 days.																					
4-20-61 Perry Federal (Cactus)	1	4184	2605	Drilling, salt and potash. 1-3/4" off at 2600'. 11 days.																					
4-21-61 Perry Federal (Cactus)	1	4184	2760	Drilling, salt and potash. 1-3/4" off at 2755'. 12 days.																					
4-22-61 Perry Federal (Cactus Drilling Co.)	1	4184	2910	Drilling, salt and anhydrite. 1-1/4" off at 2905. 13 days.																					
4-23-61 Perry Federal (Cactus)	1	4184	3125	Drilling, salt and anhydrite. 3/4" off at 3120. 14 days.																					
4-24-61 Perry Federal (Cactus)	1	4184	3125	Drilling dolomite. 1-3/4" off at 3120. 12 days.																					
4-25-61 Perry Federal (Cactus)	1	4184	3187	Drilling sand and shale. Sample tops. Base of Rustler Dolomite 1700. Top of salt 1608 (Salt in the Rustler Dolomite section). Base of salt at 3000'. Top Yates 3160. 16 days.																					
4-26-61 Perry Federal (Cactus)	1	4184	3275	Drilling dolomite and lime. 17 days.																					
4-27-61 Perry Federal (Cactus)	1	4184	3335	Drilling lime and dolomite. 1/2" off at 3311. Drilled sand 3187-3231. Drilled sand and dolomite 3231-3275. After drilling the interval 3253-3275, bailed dry, then recovered 1 gal. mud and 1 hr. bailing test. Drilled lime and sand with a light mix of 22 3275-3280. Drilled brown and gray sand 3280-3307. At 15 hr. bailing test at 3307, recovered 3 gal. mud and oil, including about a cupful of clean oil. 17 days.																					
4-28-61 Perry Federal (Cactus)	1	4184	3359	Drilling, sand and dolomite. At 33-3' bailed dry, took 1 hour test, recovered 5 gallons of oil cut mud. 19 days.																					
4-29-61 Perry Federal (Cactus)	1	4184	3411	TD. Dolomite. Preparing to run Lynes packers. Finished drilling 8" hole to 3411 in 7 Rivers dolomite at 10:30 a.m. MST 4-28-61. During the drilling of the lower Yates, evaluated a sand stringer 3378-3383 as yielding about 5 gal. oil per hour. Another sand stringer was located at 3409', that increased oil entering the bore to 10-12 gal. per hour, as determined by bailing test. The top of Seven Rivers was drilled at 3408 (+210), 39' low to Tennessee - Loomis USA "A" #2, east offset. The interval 3408-3410 was tight and barren. A 14-inch run was made, drilling to 3411 or slightly below. Sample showed 100% fluorescence. About 30% of the sample showed pinpoint porosity. A trace of vug-type porosity was found. Took a 2 hr. bailing test, recovering 9 gal. clean oil in 2 hrs. Gravity of oil 27.4° API - same as gravity of oil recovered before drilling Seven Rivers section. Assumed that oil came from Yates, and no fluid was entering the well bore from the Seven Rivers. Field information indicates that the water oil contact may be as high as 3413 (+205) or as low as 3422 (+194). Made additional bailing tests, as follows:	<table><tr><th>TIME</th><th>From</th><th>To</th><th>Gallons Oil</th><th>Gallons Wtr.</th></tr><tr><td></td><td>1:15 p.m.</td><td>4:00 p.m.</td><td>8.35</td><td>1.67</td></tr><tr><td></td><td>4:00 p.m.</td><td>7:00 p.m.</td><td>8.35</td><td>0.83</td></tr><tr><td></td><td>7:00 p.m.</td><td>9:00 p.m.</td><td>9.19</td><td>0.00</td></tr></table>	TIME	From	To	Gallons Oil	Gallons Wtr.		1:15 p.m.	4:00 p.m.	8.35	1.67		4:00 p.m.	7:00 p.m.	8.35	0.83		7:00 p.m.	9:00 p.m.	9.19	0.00
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				Moved in tubing and Lynes packers, to acidize and test the Seven Rivers. 20 days.																					
4-30-61 Perry Federal (Cactus)	1	4184	3411	TD. Preparing to re-acidize with 2500 gal. acid. During the period from 9:00 p.m. 28th to 6:00 a.m. 29th, bailed 57 gal. oil. Ran Lynes packers on 108 joints of 2-3/8" ODEUE 4-70 #/ft. J-55 tubing. Filled Lynes equipment with only enough water to inflate elements. Swung tubing to set the bottom packer 3398-3402, and the top packer 3366-3370, with the bottom of the string at 3409. Pumped 250 gal. 15% Dowell NE acid into the tubing; finished loading tubing with diesel oil. Pressured tubing to 600 psi to set packers; then opened tool to pump below packers, to treat the interval 3402-3411. Pressured tubing to 3300 psi; broke to 1700 psi. Treated at 1 bbl. per minute at 1500 psi. Job completed at 12:00 noon MST 4-29-61. Immediate shut down pressure 1450 psi. 5 minute shut down pressure 1350 psi. Rigged up to swab; found all pressure gone. Swabbed back all diesel oil used for flush. Did not recover any acid water. Swabbed dry at approximately 2:30 p.m. Ran swab at 2 hour intervals until 6:00 a.m., recovering no fluid. Noted some mud on sand line and swab. Show of gas. 21 days.																					
4-31-61 Perry Federal (Cactus)	1	4184	3411	TD. Preparing to pull tubing and Lynes packers. Commencing at 8:15 a.m., MST, 4-30-61, Dowell treated the interval 3402-3411 under Lynes packer with 2500 gallons 15% NE acid. Pumped 14-1/2 bbls. acid into tubing before encountering pressure. Pressure rose to 2500 psi. Broke back to 2200 psi. Pumped in remaining acid at 2200 psi at 4.4 bbls. per minute. Flushed with 15 bbls. of diesel oil at 2200-2500 psi at 4.5 bbls. per min. Job was complete at 9:50 a.m. Immediate shut down pressure 1500 psi. 5-min. shut-down pressure 900 psi. On vacuum in 10 minutes. Total load to recover was 60 bbls. acid water, 15 bbls. diesel oil. Swabbed back diesel oil, and 58 bbls. of acid water for a total recovery of 73 bbls. of fluid. Running swab 4 times per hour, finding 200' of fluid in the tubing. Fluid recovered showed sulphur water -- would darken a silver coin. No show of oil. Stopped swabbing at 4:30 p.m. Closed the tool to shut off the zone below the bottom packer. Opened the tool to test between packers 3370-3398. Swabbed dry; Dowell treated between packers with 250 gallons of 15% NE acid. Pumped 250 gallons acid and 7-1/2 bbls. diesel oil into tubing before encountering pressure. Pressure rose to 1700 psi. Broke back slowly to 1500 psi. Finished treatment at 1500 psi at 1.3 bbls. per min. Total flush 13-1/2 bbls. Job complete at 5:55 p.m. Immediate shut-down pressure 1400 psi. 5-min. shut-down pressure 1200 psi. 10-min. shut-down pressure 900 psi. Swabbed back load oil; swabbed dry. Ran swab at intervals throughout the night. Recovered a total of 5 gallons of water with a trace of oil. Preparing to pull Lynes equipment. 22 days.																					
4-31-61 Perry Federal (Cactus)	1	4184	3414	TD. Preparing to plug and abandon. Finished pulling tubing and Lynes packer at 11:30 a.m., MST, 5-1-61. Bailed 1 hour, recovered 14 bbls. sulphur water. Found top of fill at 3409'. Cleaned out to bottom. Fluid level 1760' from surface. Made 3' of new hole -- 3411-3414, finishing at 2:30 p.m. Fluid level 1554' from surface. Bailed hole, recovering nothing but sulphur water. Ran bailer to top of fluid, again recovered nothing but sulphur water. Preparing to run tubing open-ended to plug and abandon. 23 days.																					
4-31-61 Perry Federal (Cactus)	1	4184	3414	TD. 3100 approx. PSTD. Preparing to check top of plug. Ran bailer at 6:00 a.m., MST, 5-2-61. Found top of fluid 1400' from surface. Ran 2-3/8" OD EUE tubing, open-ended swung at 3404. Halliburton pumped 12 bbls. water thru' the tubing, followed by 100 ex. of regular neat cement. Mixing time 7 minutes; pumping time 6 minutes. Slurry weight 16.0#/gal. Followed cement with 8 bbls. of water. Job complete at 12:00 noon, 5-2-61. Pulled bottom of tubing up to 2500'. Pumped 4 bbls. of water thru' tubing to clear tubing. Picked up tubing to 1900'. Shut down over night. 24 days.																					
4-31-61 Perry Federal (Cactus)	1	4184	3414	TD. Plugged and abandoned. Resuming operations at 7:00 a.m., MST, lowered tubing and checked top of plug at 3135'. Picked up to 3105'. Cemented with 75 ex. regular neat cement, containing 6% salt/sack. Mixing time 5 minutes. Pumping time 4 minutes. Slurry weight 12.3#/gal. Hole circulated while cementing. Finished at 8:30 a.m., MST, 5-3-61. Picked up tubing to 2815'. Mixed one-hundred barrels of mud, using 20 ex. Magcogel. Mud viscosity 35 sec. Displaced fluid in hole with 100 bbls. mud, completing at 9:30 a.m. Pulled tubing up to 1711'. Mixed 75 ex. regular neat cement, containing 6% salt per sack. Mixing time 5 minutes. Pumping time 4 minutes. Slurry weight 15.4#/gal. Finished spotting plug at 11:04 a.m. Pulled tubing up to 45' from surface. Spotted 15 ex. regular neat cement. Mixing time 1 minute. Slurry weight 16.3#/gal. Completed spotting top plug at 1:00 p.m., MST, 5-3-61. Installed a piece of 4" pipe extending 4-1/2' above ground level upon which is stenciled: Name of operator. Name of well. Location. Released rig. FINAL REPORT 25 days.																					
FORMATION TOPS																									
				T/Rustler Anhydrite	1520'																				
				T/Salt	1608'																				
				B/Salt	3000'																				
				T/Yates	3166'																				
				T/7 Rivers	3408'																				
				TD	3411'																				

ILLEGIBLE