R. T. HICKS CONSULTANTS, LTD.

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July 3, 2015

Ms. Heather Patterson NMOCD District 2 811 S. First Street Artesia, New Mexico 88210 Via Email and US Mail

RE: Murchison – War Horse Federal #3H Release, initial C-141 form

Dear Ms. Patterson:

On behalf of Murchison Oil and Gas, R.T Hicks Consultants submits the attached initial C-141 form for the above-referenced release. At 10:00 am on June 19, a release consisting of oil and produced water was discovered by a truck driver. A fire tube gasket on the heater treater ruptured, releasing approximately 35 barrels of fluid onto the location and affecting approximately 6,325 square feet of surface. A vacuum truck was immediately dispatched and recovered 30 barrels of fluid. After standing fluid was removed from the surface, moisture was observed to penetrate approximately 0.25-0.5 inch of depth.



6/19/2015 Removing fluid from surface



6/20/2015 Affected material replaced

On June 20, the fire tube gasket was replaced and approximately 0.5 inch of surface material was excavated from the entire footprint of the release. The excavated material (approximately 9 cubic yards) was placed on 20-mil plastic on the west end of the location. Earthen berms made from unaffected on-site material were constructed to stabilize the edges of the plastic and to inhibit lateral migration. Caliche was spread on the affected surface 0.5 inch thick to replace the excavated material on the location pad. On June 25, chloride field tests were conducted on samples from two areas of the affected surface where fluid accumulated during the release. Both samples were from 2 inches below the pad surface and yielded 121 and 112 mg/kg concentrations, confirming that affected materials did not remain below the excavation. A chloride field test was also conducted on a 5-point composite sample of the excavated stockpile with a result of 4,446 mg/kg.

In May 2015, temporary pit applications were submitted to the District for the nearby staked wells War Horse Federal Com #2H and War Horse Federal Com #4H. Murchison has employed a drilling rig and these wells are scheduled to be drilled by the end of the year. In-place closure is planned for these sites. During the closure of the first of these wells to be drilled, the excavated soil from the #3H release will be added to the pit contents to stabilize the drilling waste in the pit in accordance with NMAC 19.15.17.13 of the Pit Rule. At the completion of closure of the War Horse temporary pit, a final C-141 form will be submitted to the District along with documentation of the final deposition of the excavated material from this release.

We have examined OCD Rules and conclude that the proposed remediation plan not only provides the highest net environmental benefit but is also the least expensive and is compliant with Part 29, Part 34 (after revision¹) and Part 17. Murchison fully understands that employing this small volume of impacted material for stabilization must be considered in the calculations to determine compliance with 19.15.17.13 (closure requirements) for the War Horse temporary pit.

Please contact me with any questions regarding this submission.

Sincerely,

R.T. Hicks Consultants

Knistin Pope

Kristin Pope

Copy: Murchison Oil & Gas, Concho Resources, BLM (Jim Amos)

Enclosure: initial C-141 form

¹ Mr. Brancard and Mr. Feldewert are discussing correction of an error in the 2015 version of Part 34 that eliminated the previously-approved language that allows oilfield waste to be disposed in a pit pursuant to an approved remediation plan under Part 29.

State of New Mexico Energy Minerals and Natural Resources

Form C-141 Revised August 8, 2011

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

							OPERATOR			🛛 Initial Report 🗌 Final Rep		
Name of Company Murchison Oil & Gas, Inc.						Contact				•	Greg Boans	
Address 7250 Dallas Parkway, Suite 1400, Plano, TX 75024						Telephone No.					(575) 628-3932	
Facility NameWar Horse Fed Com #3H						Facility Typ	e			Η	Production Battery	
Surface Ow	ner	ces Mineral Ov	vner	BLM			API No. 30-015-41227					
LOCATION OF RELEASE												
Unit Letter Section Township Range Feet from the North/South Line Feet from the East/West Line County												
Ι	21	18S	29E	2290		South	175		East		Eddy	
	L	atitude	32° 4	43' 55.195" N	_ Longitude	e104° 04'18	.317"	W				
NATURE OF RELEASE												
Type of ReleaseOil and Produced WaterVolume of Release35 bblsVolume Recovered30 bbls												
Source of Rel	ease		Date and Hour of Occurrence Date and Hour of Discovery									
XV T 1	· N. C. C	reater	r 6/19/2015, before 10:00 am 6/19/2015 10:00 am If YES, To Whom?									
Was Immedia	tte Notice C	uired										
By Whom? Kristin Pope												
Was a Watercourse Reached?						If YES, Volume Impacting the Watercourse.						
If a Watercourse was Impacted, Describe Fully.*												
n/a												
Describe Cause of Problem and Remedial Action Taken.*												
Fluid was lost due to a failure of a fire tube gasket on the heater treater. Within 1 hour of discovery, a vacuum truck removed standing fluid. The gasket was replaced.												
Describe Area Affected and Cleanup Action Taken.*												
•												
Produced water and oil was released from the heater treater, affecting approximately $6,325$ ft ² , all of which remained on the location pad.												
Soil moisture indicated that penetration was $\frac{1}{4}$ - $\frac{1}{2}$ inch deep, chloride field tests on 2-in-deep samples confirmed. A backhoe excavated the affected material (approx. 9 yds ³) from the surface of the release footprint and placed it on top of a 20-mil plastic liner. Earthen berms												
made from surrounding unaffected material were built around the stockpile. Clean caliche was used to replace the excavated material on												
		0				1			-			
	the location pad. Two War Horse wells are planned to be drilled using a temporary pit and the excavated soil from this release will be used as stabilization material during the in-place closure of the first of these wells to be drilled.											
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and												
	regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger											
public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability												
should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health												
	or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.											
						OIL CONSERVATION DIVISION						
An Am												
Signature: _	100											
Printed Name: Greg Boans						Approved by Environmental Specialist:						
Title:			Prod	luction Superintend	ent	Approval Date:			Expiration Date:			
E-mail Addre	ss:			gboans@jdmii.co	om	Conditions of	Approval:			Attached		
Date: 7/3/20	15	Pho	ne [,] (575) 628-3932						. mucheu		
Attach Addit				, 020-3732								