NM2 - _21___

ANNUAL REPORT

__2017___

Delivery Confirmation No.
9405 5118 9956 0579 9045 18

March 8, 2018
Mr. Jim Griswold
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87504

Re: Centralized Surface Waste Management Facility NM-02-0021
2017 Annual Monitoring Report
John H. Hendrix Corporation
Section 15, Township 24 South, Range 36 East, Lea County, New Mexico

Dear Mr. Griswold:

Trident Environmental, as agent for John H. Hendrix Corporation (JHHC), submits this 2017 *Annual Monitoring Report* to the New Mexico Oil Conservation Division (OCD) for centralized surface waste management facility NM-02-0021 (facility).

Operation Background

Pursuant to 19.15.9.711 NMAC, OCD issued permit number NM-02-0021 to JHHC on November 29, 2004, to construct and operate a centralized surface waste management facility for treating non-hazardous petroleum hydrocarbon-impacted soil resulting from spills, releases and pits from JHHC oil and gas operations. JHHC is the surface landowner of this property which occupies approximately 200 acres in the west third of Section 15, Township 24 South, Range 36 East, Lea County, New Mexico, as depicted on the Site Location Map (Figure 1).

The facility consists of twelve main cells, numbered 1 through 12 which are contained within the fenced boundary of the property. Each 12 acre cell measures approximately 400 ft (north-south) by 1450 ft (east-west). The main cells are subdivided into three sub-cells, lettered A, B, and C, each measuring approximately 400 ft x 480 ft (4.40 acres). Figure 2 depicts the cell grid format and most recent sample locations obtained on December 28, 2017.

Cells 1A, 1B, and 1C are closed, and cells 10C, 11A, 11B, 11C, 12A, 12B, and 12C have reached capacity. Cell 10B has not reached capacity, nor has it received imported soil since October 2009. Cells 10B, 10C, 11A, 11B, 11C, 12A, 12B, and 12C had been tilled once every two weeks (biweekly) until OCD granted approval to cease tilling on November 1, 2017. The most recently available Google Earth image of the facility is depicted in Figure 3.

Sampling Procedures

Treatment zone samples were collected from an approximate depth of 1 foot into the treatment (tilled) zone using a stainless steel trowel. Treatment zone sample aliquots from four discrete locations are composited as a single sample and immediately placed in clean laboratory-grade 4-ounce containers, properly labeled, and placed in a cooler with ice.

Vadose zone samples are collected at approximately 3 feet below native ground surface close to where a hard caliche layer is encountered using a decontaminated hand auger after a backhoe temporarily excavates the overlying treatment zone soil from each location. The samples are then placed in clean laboratory-grade 4-ounce glass containers, properly labeled, and placed in a cooler with ice. The auger holes were backfilled with bentonite and hydrated with potable water. The removed treatment zone soils were then immediately returned to the temporary excavation. Sample locations were obtained using a handheld global positioning device and are recorded in Figure 2.

Samples were hand-delivered under chain of custody to Cardinal Laboratories (Hobbs, NM) for analysis. The treatment zone samples were analyzed for TPH and chloride, while the vadose zone samples were analyzed for BTEX, TPH, metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, iron, copper, manganese, and zinc) and major ions (total alkalinity, bicarbonate, calcium, magnesium, potassium, sodium, chloride and sulfate).

Soil Analytical Results

A three-year summary of BTEX, TPH, and chloride analytical results for the background, treatment zone, and vadose zone samples are listed in Tables 1. The metal and major ion analytical results for the 2017 annual sampling event are listed in Table 2 and 3, respectively. Laboratory analytical reports, chains of custody, and sample locations are included in Appendix A.

JHHC continues to monitor the landfarm in accordance with permit conditions as we look forward to working with you towards meeting closure status for this facility. Please feel free to call me at 432-638-8740 or Carolyn Haynes at 432-684-6631, if you have any questions.

Respectfully,

Gilbert J. Van Deventer, PG
Trident Environmental - Project Manager

Enclosures: Laboratory results in tabular format, site maps with sample locations, and lab analytical report

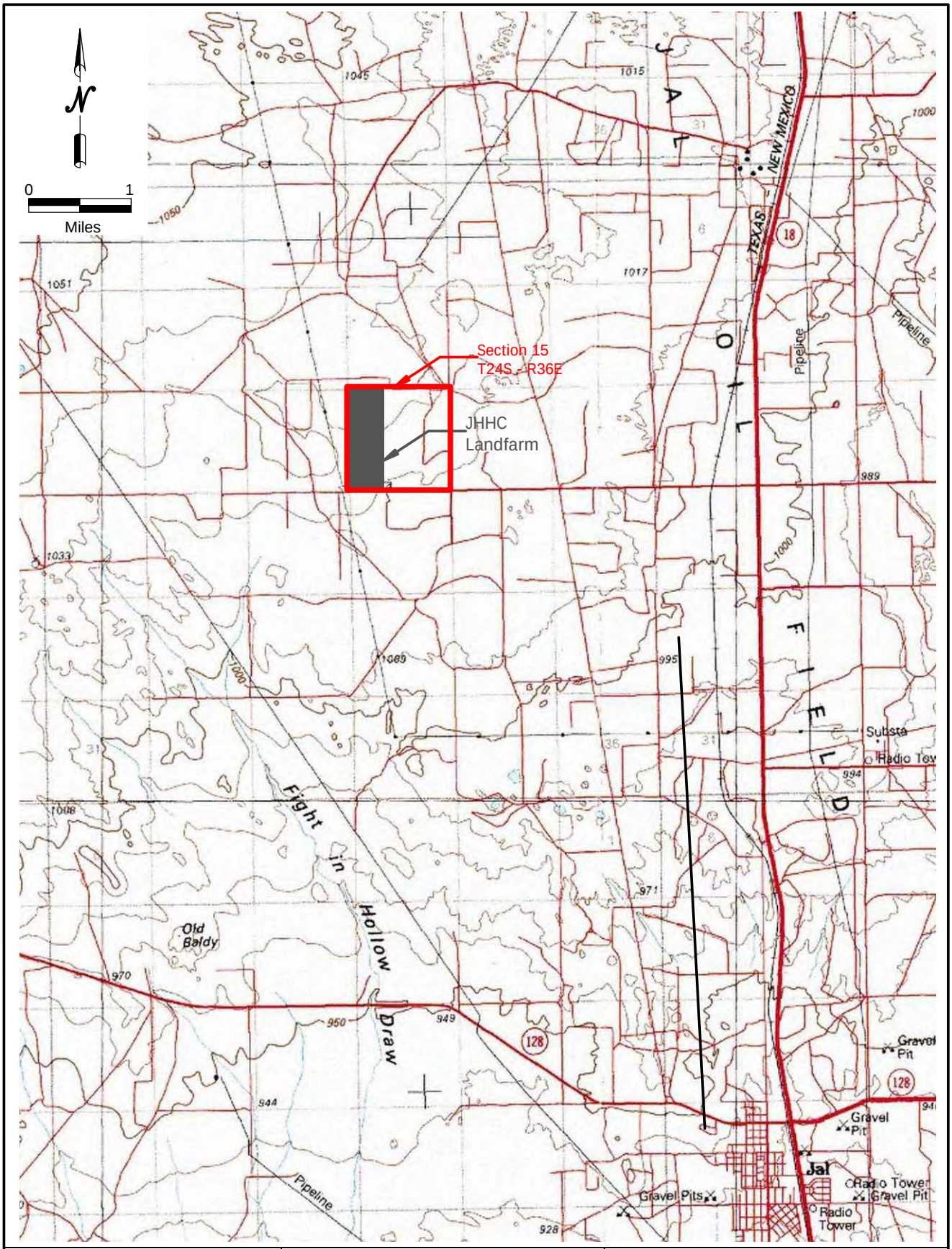
cc: Carolyn Haynes (JHHC)
Olivia Yu (OCD-District 1)

FIGURES

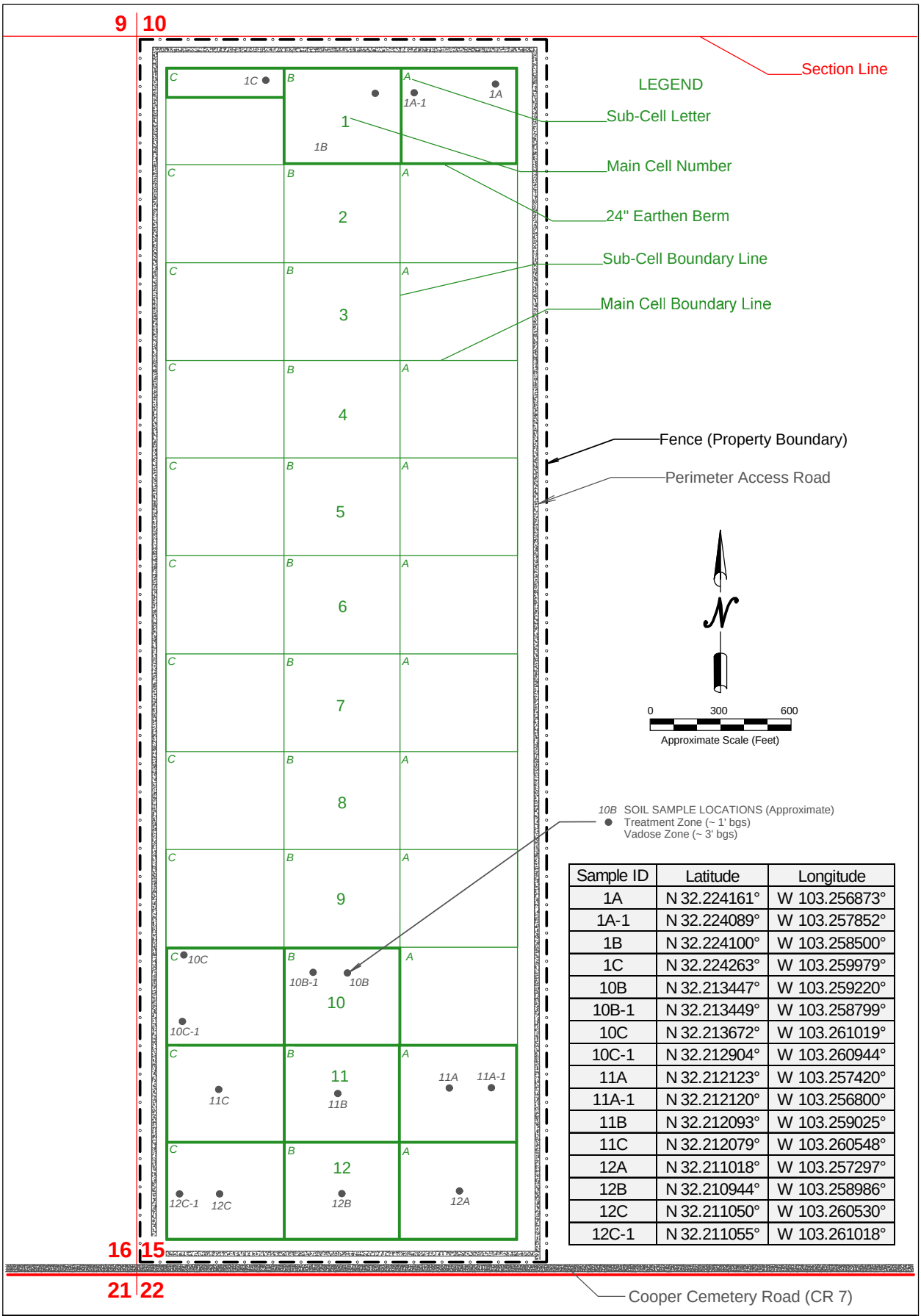
Figure 1 - Site Location Map

Figure 2 - Sample Location Map (December 28, 2017)

Figure 3 - Google Earth Image Map



TRIDENT ENVIRONMENTAL	John H. Hendrix Corp. Centralized Landfarm (NM-02-021) T24S - R36E - Section 15 (W/2) Lea County, New Mexico	FIGURE 1 SITE LOCATION MAP (USGS - Jal NM 100K Quadrangle



Sample ID	Latitude	Longitude
1A	N 32.224161°	W 103.256873°
1A-1	N 32.224089°	W 103.257852°
1B	N 32.224100°	W 103.258500°
1C	N 32.224263°	W 103.259979°
10B	N 32.213447°	W 103.259220°
10B-1	N 32.213449°	W 103.258799°
10C	N 32.213672°	W 103.261019°
10C-1	N 32.212904°	W 103.260944°
11A	N 32.212123°	W 103.257420°
11A-1	N 32.212120°	W 103.256800°
11B	N 32.212093°	W 103.259025°
11C	N 32.212079°	W 103.260548°
12A	N 32.211018°	W 103.257297°
12B	N 32.210944°	W 103.258986°
12C	N 32.211050°	W 103.260530°
12C-1	N 32.211055°	W 103.261018°

TRIDENT ENVIRONMENTAL

John H. Hendrix Corp.
Centralized Landfarm (NM-02-021)
T24S - R36E - Section 15 (W/2)
Lea County, New Mexico

FIGURE 2

Sample Location Map
December 28, 2017

TRIDENT ENVIRONMENTAL	John H. Hendrix Corp. Centralized Landfarm (NM-02-021) T24S - R36E - Section 15 (W/2) Lea County, New Mexico	FIGURE 3 Google Earth Image Map Image Date: November 2, 2017

TABLES

Table 1 - BTEX, TPH, and Chloride Concentrations (2015-2016-2017)

Table 2 - Metal Concentrations (December 28, 2017)

Table 3 - Major Ion Concentrations (December 28, 2017)

Table 1

3-Year Summary of BTEX, TPH, and Chloride Concentrations

JHHC Landfarm (NM-02-021)

Cell ID	Sample Date	Sample Zone	Sample ID (Depth)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
1A	09/30/15	Treatment	1A (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	09/30/15		1A-1 (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		1A (1')	<0.050	<0.300	<10	<10	<10	<30	21
	10/12/16		1A-1 (1')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		1A (1')	---	---	<10	<10	<10	<30	8
	12/28/17		1A-1 (1')	---	---	<10	<10	<10	<30	16
	09/30/15	Vadose	1A (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	09/30/15		1A-1 (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		1A (3')	<0.050	<0.300	<10	<10	<10	<30	21
	10/12/16		1A-1 (3')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		1A (3')	<0.050	<0.300	<10	<10	<10	<30	4
	12/28/17		1A-1 (3')	<0.050	<0.300	<10	<10	<10	<30	20
1B	09/30/15	Treatment	1B (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		1B (1')	<0.050	<0.300	<10	<10	<10	<30	8
	12/28/17		1B (1')	---	---	<10	<10	<10	<30	12
	09/30/15	Vadose	1B (3')	<0.050	<0.300	<10	<10	<10	<30	<10
	10/12/16		1B (3')	<0.050	<0.300	<10	<10	<10	<30	<20
	12/28/17		1B (3')	<0.050	<0.300	<10	<10	<10	<30	8
1C	09/30/15	Treatment	1C (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		1C (1')	<0.500	<0.300	<10	<10	<10	<30	12
	12/28/17		1C (1')	---	---	<10	<10	<10	<30	8
	09/30/15	Vadose	1C (3')	<0.500	<0.300	<10	<10	<10	<30	<5
	10/12/16		1C (3')	<0.500	<0.300	<10	<10	<10	<30	8
	12/28/17		1C (3')	<0.500	<0.300	<10	<10	<10	<30	8
10B	09/30/15	Treatment	10B (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	09/30/15		10B-1 (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		10B (1')	<0.050	<0.300	<10	<10	<10	<30	<4
	10/12/16		10B-1 (1')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		10B (1')	---	---	<10	<10	<10	<30	4
	12/28/17		10B-1 (1')	---	---	<10	<10	<10	<30	12
	09/30/15	Vadose	10B (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	09/30/15		10B-1 (3')	<0.050	<0.300	<10	<10	<10	<30	20
	10/12/16		10B (3')	<0.050	<0.300	<10	<10	<10	<30	8
	10/12/16		10B-1 (3')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		10B (3')	<0.050	<0.300	<10	<10	<10	<30	4
	12/28/17		10B-1 (3')	<0.050	<0.300	<10	<10	<10	<30	<4

Table 1

3-Year Summary of BTEX, TPH, and Chloride Concentrations

JHHC Landfarm (NM-02-021)

Cell ID	Sample Date	Sample Zone	Sample ID (Depth)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
10C	09/30/15	Treatment	10C (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	09/30/15		10C-1 (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		10C (1')	<0.050	<0.300	<10	<10	<10	<30	12
	10/12/16		10C-1 (1')	<0.050	<0.300	<10	<10	<10	<30	8
	12/28/17		10C (1')	---	---	13.9	52.7	55.4	<122	4
	12/28/17		10C-1 (1')	---	---	<10	<10	<10	<30	4
	09/30/15	Vadose	10C (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	09/30/15		10C-1 (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		10C (3')	<0.050	<0.300	<10	<10	<10	<30	<4
	10/12/16		10C-1 (3')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		10C (3')	<0.050	<0.300	<10	<10	<10	<30	12
	12/28/17		10C-1 (3')	<0.050	<0.300	<10	<10	<10	<30	4
11A	09/30/15	Treatment	11A (1')	<0.050	<0.300	<10	15.7	12.3	<32	<5
	10/12/16		11A (1')	<0.050	<0.300	<10	<10	<10	<30	12
	10/12/16		11A-1(1')	<0.050	<0.300	<10	<10	<10	<30	12
	12/28/17		11A (1')	---	---	<10	<10	10.9	<30	4
	12/28/17		11A-1(1')	---	---	<10	<10	<10	<30	<4
	09/30/15	Vadose	11A (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		11A (3')	<0.050	<0.300	<10	<10	<10	<30	8
	10/12/16		11A-1(3')	<0.050	<0.300	<10	<10	<10	<30	8
	12/28/17		11A (3')	<0.050	<0.300	<10	<10	<10	<30	8
	12/28/17		11A-1(3')	<0.050	<0.300	<10	<10	<10	<30	<4
11B	09/30/15	Treatment	11B (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	09/30/15		11B-1 (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		11B (1')	<0.050	<0.300	<10	<10	<10	<30	8
	12/28/17		11B (1')	---	---	<10	<10	<10	<30	<4
	09/30/15	Vadose	11B (3')	<0.050	<0.300	<10	<10	<10	<30	20
	09/30/15		11B-1 (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		11B (3')	<0.050	<0.300	<10	<10	<10	<30	8
	12/28/17		11B (3')	<0.050	<0.300	<10	<10	<10	<30	<4
11C	09/30/15	Treatment	11C (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		11C (1')	<0.050	<0.300	<10	<10	<10	<30	8
	12/28/17		11C (1')	---	---	<10	<10	<10	<30	<4
	09/30/15	Vadose	11C (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		11C (3')	<0.050	<0.300	<10	<10	<10	<30	8
	12/28/17		11C (3')	<0.050	<0.300	<10	<10	<10	<30	4

Table 1

3-Year Summary of BTEX, TPH, and Chloride Concentrations

JHHC Landfarm (NM-02-021)

Cell ID	Sample Date	Sample Zone	Sample ID (Depth)	Benzene (mg/kg)	BTEX (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	ORO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
12A	09/30/15	Treatment	12A (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	09/30/15		12A-1 (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		12A (1')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		12A (1')	---	---	<10	<10	<10	<30	4
	09/30/15	Vadose	12A (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	09/30/15		12A-1 (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		12A (3')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		12A (3')	<0.050	<0.300	<10	<10	<10	<30	<4
12B	09/30/15	Treatment	12B (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		12B (1')	<0.050	<0.300	<10	30.9	34.6	<69	<4
	12/28/17		12B (1')	---	---	<10	<10	<10	<30	<4
	09/30/15	Vadose	12B (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		12B (3')	<0.050	<0.300	<10	<10	<10	<30	8
	12/28/17		12B (3')	<0.050	<0.300	<10	<10	<10	<30	<4
12C	09/30/15	Treatment	12C (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		12C (1')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		12C-1 (1')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		12C (1')	---	---	<10	<10	<10	<30	<4
	12/28/17		12C-1 (1')	---	---	<10	<10	<10	<30	<4
	09/30/15	Vadose	12C (2')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		12C (3')	<0.050	<0.300	<10	<10	<10	<30	<5
	10/12/16		12C-1 (3')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		12C (3')	<0.050	<0.300	<10	<10	<10	<30	<4
	12/28/17		12C-1 (3')	<0.050	<0.300	<10	<10	<10	<30	4
Closure performance standards (treatment zone)				0.2	50	NA	NA	500	500	1,000

Table 2

Summary of Metal Concentrations - Soil Analytical Results

Cell No.	Sample Date	Sample Type	Sample ID (Depth in Ft)	Subsection A Metals (mg/kg)								Subsection B Metals (mg/kg)			
				As	Ag	Ba	Cd	Cr	Pb	Hg	Se	Cu	Fe	Mn	Zn
7B	11/29/04	Background	Facility (2' -3')	3.65	<0.25	507	0.341	3.01	0.5	<0.25	<0.2	---	---	---	---
1A	04/12/07	Background	SS-1A (2' -3')	3.23	<0.094	55.4	0.196	13.4	6.84	<0.016	1.70	---	---	---	---
	12/28/17	Vadose	1A (3')	2.88	0.034	45.2	<0.500	7.42	5.78	<0.106	<0.252	1.85	8,580	41.5	17.7
			1A-1 (3')	1.16	<0.020	15.7	<0.500	3.21	2.57	<0.101	<0.252	1.15	3,860	32.0	7.1
1B	04/12/07	Background	SS-1B (2' -3')	3.05	<0.086	48.4	0.178	12.5	6.30	<0.014	1.46	---	---	---	---
	12/28/17	Vadose	1B (3')	4.17	0.028	53.2	<0.500	9.02	7.32	<0.110	<0.252	2.28	10,200	60.1	20.9
1C	04/12/07	Background	SS-1C (2' -3')	2.24	<0.175	46.8	0.142	9.14	5.13	<0.04	1.35	---	---	---	---
	12/28/17	Vadose	1C (3')	2.75	0.033	41.5	<0.500	7.10	5.33	<0.106	<0.252	2.13	8,330	45.5	17.4
10A	01/07/08	Background	10A (2' -3')	1.63	<0.100	34.1	<0.100	6.55	4.09	<0.015	1.19	---	---	---	---
10B	01/07/08	Background	10B (2' -3')	1.24	<0.2	23.0	<0.3	5.24	3.05	<0.04	1.01	---	---	---	---
	12/28/17	Vadose	10B (3')	1.61	<0.020	33.6	<0.500	4.45	3.60	<0.107	<0.252	2.48	5,210	67.6	12.0
			10B-1 (3')	1.51	<0.020	29.6	<0.500	4.42	3.43	<0.110	<0.252	2.01	4,850	49.4	11.0
10C	01/07/08	Background	10C (2' -3')	1.43	<0.2	23.5	<0.3	5.31	3.36	<0.04	1.08	---	---	---	---
	12/28/17	Vadose	10C (3')	5.63	0.046	129.0	<0.500	13.70	11.30	<0.120	0.551	4.14	16,700	107	39.1
			10C-1 (3')	3.46	0.047	60.2	<0.500	8.54	6.37	<0.112	0.259	2.45	9,760	62.8	21.5
11A	01/07/08	Background	11A (2' -3')	1.53	<0.2	27.1	<0.3	5.93	3.46	<0.04	0.938	---	---	---	---
	12/28/17	Vadose	11A (3')	3.48	0.047	46.1	<0.500	8.94	6.43	<0.112	0.341	2.54	9,780	63.1	21.5
			11A-1 (3')	2.51	0.032	37.8	<0.500	6.55	4.90	<0.109	0.341	1.99	7,950	54.0	17.1
11B	01/07/08	Background	11B (2' -3')	1.23	<0.2	21.8	<0.3	4.98	3.53	<0.04	0.735	---	---	---	---
	12/28/17	Vadose	11B-1 (3')	2.01	<0.092	38.4	<0.141	6.18	4.52	<0.019	<0.448	1.95	7,630	53.1	16.5
			11B (3')	2.64	0.026	24.4	<0.500	6.45	5.19	<0.108	<0.252	2.01	7,040	48.5	14.9
11C	10/15/07	Background	SS-11C (2' -3')	2.67	<0.2	300	0.113	5.47	2.62	<0.04	0.490	---	---	---	---
	12/28/17	Vadose	11C (3')	2.10	0.025	40.3	<0.500	5.45	4.22	<0.109	<0.252	2.16	5,230	42.6	11.4
12A	04/12/07	Background	SS-12A (2' -3')	2.90	<0.2	50.8	0.176	11.4	5.61	<0.04	1.40	---	---	---	---
	12/28/17	Vadose	12A-1 (3')	1.69	<0.092	37.1	<0.141	5.95	4.17	<0.019	<0.448	2.00	6,830	59.2	14.3
			12A (3')	1.89	<0.020	35.4	<0.500	5.44	4.58	<0.106	<0.252	2.52	6,140	68.6	13.5
12B	01/07/08	Background	SS-12B (2' -3')	2.58	<0.2	236	0.202	5.76	3.08	<0.04	1.07	---	---	---	---
	12/28/17	Vadose	12B (3')	1.82	<0.020	31.3	<0.500	5.13	4.03	<0.106	<0.252	2.11	5,260	54.1	11.3
12C	04/12/07	Background	SS-12C (2' -3')	1.89	<0.2	62.6	0.152	6.43	3.60	<0.04	1.34	---	---	---	---
	12/28/17	Vadose	12C (3')	1.72	<0.020	34.7	<0.500	4.91	4.11	<0.108	<0.252	2.29	5,920	68.8	13.6
			12C-1 (3')	1.40	<0.020	28.9	<0.500	4.09	3.53	<0.106	<0.252	2.27	4,920	61.2	11.1

Table 3

Summary of Major Ion Concentrations - Soil Analytical Results

Cell No.	Sample Date	Sample Type	Sample ID (Depth)	Cations (mg/kg)				Anions (mg/kg)			
				Ca	Mg	K	Na	Cl	SO_4	T-Alk	HCO_3
7B	11/29/04	Background	Facility (2' -3')	220,000	2,240	274	2,060	<20	<2.5	1,340	---
1A	04/12/07	Background	SS-1A (2' -3')	1,650	2,300	2,980	30.5	<4.98	<9.96	76.1	---
	12/28/17	Vadose	1A (3')	1,130	1,450	1,870	101	4	5,500	224	<4
			1A-1 (3')	176	547	643	159	20	2,080	142.0	<4
1B	04/12/07	Background	SS-1B (2' -3')	1,570	2,140	2,950	30.2	<4.96	<9.92	89.1	---
	12/28/17	Vadose	1B (3')	2,070	2,000	2,370	101	8	2,010	181	<4
1C	04/12/07	Background	SS-1C (2' -3')	2,290	1,720	1,740	19.2	<4.93	<9.86	166	<49.8
	12/29/14	Vadose	1C (3')	1,370	1,440	1,830	101	8	1,620	176	<4
10B	01/07/08	Background	10B (2' -3')	533	602	968	<12.5	<5.21	<10.4	<52.1	<52.1
	12/28/17	Vadose	10B (3')	16,800	1,050	1,260	82.8	4	1,490	508	<4
			10B-1 (3')	10,200	922	1,110	149	44	430	278	<4
10C	01/07/08	Background	10C (2' -3')	513	554	898	<12.6	<5.13	<10.3	<51.0	<51.0
	12/28/17	Vadose	10C (3')	14,200	3,890	3,770	279	12	50.8	6,100	<4
			10C-1 (3')	3,560	1,590	1,930	<31.1	4	<40	3,170	<4
11A	01/07/08	Background	11A (2' -3')	642	658	1,030	<12.7	<5.17	<10.3	56.0	56.0
	12/28/17	Vadose	11A (3')	1,800	1,660	2,090	139	8	3,820	410	<4
			11A-1 (3')	1,210	1,190	1,790	151	<4	3,320	176.0	<4
11B	01/07/08	Background	11B (2' -3')	482	494	809	<12.6	<5.14	<10.3	<51.6	<51.6
	12/28/17	Vadose	11B (3')	952	1,170	1,560	68.6	<4	3,010	181	<4
11C	10/15/07	Background	SS-11C (2' -3')	170,000	2,160	1,090	72.5	<5.64	41.4	318	<56.6
	12/28/17	Vadose	11C (3')	5,960	903	1,100	<31.1	4	523	376.0	<4
12A	04/12/07	Background	SS-12A (2' -3')	1,980	2,030	2,210	23.2	<4.97	<9.94	163	<50
	12/28/17	Vadose	12A-1 (3')	943	937	1,410	<31.1	<4	3,100	444.0	<4
12B	01/07/08	Background	SS-12B (2' -3')	256,000	3,330	1,320	91.2	<4.88	23	700	<49.8
	12/28/17	Vadose	12B (3')	703	801	1,180	155	<4	2,020	303	<4
12C	04/12/07	Background	SS-12C (2' -3')	53,400	1,170	1,280	29.9	<4.97	<9.94	506	<49.8
	12/28/17	Vadose	12C (3')	1,150	1,040	1,380	<31.1	<4	2,090	288	<4
			12C-1 (3')	1,260	888	1,090	<31.1	4	811	239	<4

ATTACHMENT A

LABORATORY ANALYTICAL REPORTS

(December 28, 2017 Sampling Event)

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

March 07, 2018

CAROLYN HAYNES

JOHN H. HENDRIX CORPORATION

P. O. BOX 3040

MIDLAND, TX 79702

RE: JHHC SWMF NM-02-0021

Enclosed are the results of analyses for samples received by the laboratory on 12/28/17 18:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

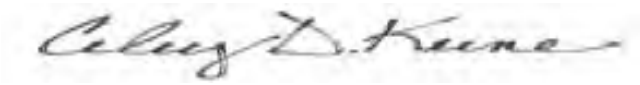
Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
1A (1')	H703620-01	Soil	28-Dec-17 09:25	28-Dec-17 18:05
1A (3')	H703620-02	Soil	28-Dec-17 09:35	28-Dec-17 18:05
1A-1 (1')	H703620-03	Soil	28-Dec-17 09:40	28-Dec-17 18:05
1A-1 (3')	H703620-04	Soil	28-Dec-17 09:50	28-Dec-17 18:05
1B (1')	H703620-05	Soil	28-Dec-17 10:20	28-Dec-17 18:05
1B (3')	H703620-06	Soil	28-Dec-17 10:30	28-Dec-17 18:05
1C (1')	H703620-07	Soil	28-Dec-17 10:40	28-Dec-17 18:05
1C (3')	H703620-08	Soil	28-Dec-17 10:50	28-Dec-17 18:05
10B (1')	H703620-09	Soil	28-Dec-17 12:00	28-Dec-17 18:05
10B (3')	H703620-10	Soil	28-Dec-17 12:10	28-Dec-17 18:05
10B-1 (1')	H703620-11	Soil	28-Dec-17 12:20	28-Dec-17 18:05
10B-1 (3')	H703620-12	Soil	28-Dec-17 12:30	28-Dec-17 18:05
10C (1')	H703620-13	Soil	28-Dec-17 11:10	28-Dec-17 18:05
10C (3')	H703620-14	Soil	28-Dec-17 11:20	28-Dec-17 18:05
10C-1 (1')	H703620-15	Soil	28-Dec-17 11:30	28-Dec-17 18:05
10C-1 (3')	H703620-16	Soil	28-Dec-17 11:40	28-Dec-17 18:05
11A (1')	H703620-17	Soil	28-Dec-17 13:40	28-Dec-17 18:05
11A (3')	H703620-18	Soil	28-Dec-17 13:50	28-Dec-17 18:05
11A-1 (1')	H703620-19	Soil	28-Dec-17 14:05	28-Dec-17 18:05
11A-1 (3')	H703620-20	Soil	28-Dec-17 14:15	28-Dec-17 18:05
11B (1')	H703620-21	Soil	28-Dec-17 13:20	28-Dec-17 18:05
11B (3')	H703620-22	Soil	28-Dec-17 13:30	28-Dec-17 18:05
11C (1')	H703620-23	Soil	28-Dec-17 12:50	28-Dec-17 18:05
11C (3')	H703620-24	Soil	28-Dec-17 13:00	28-Dec-17 18:05
12A (1')	H703620-25	Soil	28-Dec-17 14:30	28-Dec-17 18:05
12A (3')	H703620-26	Soil	28-Dec-17 14:40	28-Dec-17 18:05
12B (1')	H703620-27	Soil	28-Dec-17 15:00	28-Dec-17 18:05

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12B (3')	H703620-28	Soil	28-Dec-17 15:10	28-Dec-17 18:05
12C (1')	H703620-29	Soil	28-Dec-17 15:20	28-Dec-17 18:05
12C (3')	H703620-30	Soil	28-Dec-17 15:30	28-Dec-17 18:05
12C-1 (1')	H703620-31	Soil	28-Dec-17 15:40	28-Dec-17 18:05
12C-1 (3')	H703620-32	Soil	28-Dec-17 15:50	28-Dec-17 18:05

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1A (1')

H703620-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**8.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*71.3 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*62.4 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1A (3')

H703620-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**224**		20.0	mg/kg	1	7032303	AC	10-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Chloride	**4.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Sulfate	**5500**		1000	mg/kg	100	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**184**		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*106 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*85.0 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*76.8 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**94.4**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**11000**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**1330**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1A (3')

H703620-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**8580**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**1450**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**41.5**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1870**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	**101**	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	J
Zinc	**17.7**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**2.88**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**45.2**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.223**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**7.42**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**1.85**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**5.78**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	**0.0343**	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Total Mercury by CVAA										
Mercury	<0.0226	0.0226	0.106	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1A-1 (1')

H703620-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**16.0**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*102 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*90.7 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1A-1 (3')

H703620-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**142**		20.0	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Chloride	**20.0**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Sulfate	**2080**		500	mg/kg	50	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**116**		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*106 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*103 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*93.8 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**98.5**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**3390**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**176**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1A-1 (3')

H703620-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**3860**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**547**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**32.0**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**643**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	**159**	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	J
Zinc	**7.06**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**1.16**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**15.7**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.143**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**3.21**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**1.15**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**2.57**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	<0.0204	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Total Mercury by CVAA										
Mercury	<0.0217	0.0217	0.101	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1B (1')

H703620-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**12.0**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*89.7 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*81.6 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1B (3')

H703620-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**181**		20.0	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Chloride	**8.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Sulfate	**2010**		500	mg/kg	50	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**148**		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*107 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*108 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*99.1 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**90.8**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**13100**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**2070**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1B (3')

H703620-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**10200**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**2000**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**60.1**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**2370**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	<31.1	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Zinc	**20.9**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**4.17**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**53.2**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.272**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**9.02**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.28**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**7.32**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	**0.0281**	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Total Mercury by CVAA										
Mercury	<0.0235	0.0235	0.110	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1C (1')

H703620-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**8.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*106 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*96.8 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1C (3')

H703620-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**176**		20.0	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Chloride	**8.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Sulfate	**1620**		500	mg/kg	50	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**144**		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*103 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*96.7 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*88.2 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**93.9**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**10600**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**1370**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

1C (3')

H703620-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**8330**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**1440**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**45.5**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1830**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	<31.1	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Zinc	**17.4**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**2.75**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**41.5**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.215**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**7.10**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.13**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**5.33**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	**0.0334**	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Total Mercury by CVAA										
Mercury	<0.0227	0.0227	0.106	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10B (1')

H703620-09 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**4.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*102 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*94.5 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10B (3')

H703620-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**508**		20.0	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Chloride	**4.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Sulfate	**1490**		333	mg/kg	33.3	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**416**		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*107 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*105 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*95.8 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**93.5**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**5470**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**16800**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10B (3')

H703620-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**5210**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**1050**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**67.6**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1260**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	**82.8**	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	J
Zinc	**12.0**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**1.61**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**33.6**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.230**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**4.45**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.48**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**3.60**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	<0.0204	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Total Mercury by CVAA										
Mercury	<0.0228	0.0228	0.107	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10B-1 (1')

H703620-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**12.0**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*101 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*93.9 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10B-1 (3')

H703620-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**278**		20.0	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Chloride	**44.0**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Sulfate	**430**		100	mg/kg	10	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**228**		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*106 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*98.7 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*92.3 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**91.0**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**5210**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**10200**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10B-1 (3')

H703620-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**4850**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**922**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**49.4**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1110**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	**149**	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	J
Zinc	**11.0**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**1.51**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**29.6**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.214**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**4.42**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.01**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**3.43**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	<0.0204	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Total Mercury by CVAA										
Mercury	<0.0234	0.0234	0.110	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10C (1')

H703620-13 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**4.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*99.9 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*92.3 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10C (3')

H703620-14 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**6100**		20.0	mg/kg	1	7032303	AC	10-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	10-Jan-18	310.1M	
Chloride	**12.0**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Sulfate	**50.8**		40.0	mg/kg	4	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**5000**		4.00	mg/kg	1	7032303	AC	10-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*102 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010202	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*106 %*	*28.3-164*		*8010202*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*98.4 %*	*34.7-157*		*8010202*	MS	*02-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**83.4**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**23100**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**14200**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10C (3')

H703620-14 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**16700**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**3890**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**107**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**3770**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	**279**	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Zinc	**39.1**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**5.63**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**129**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.495**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**13.7**	1.10	2.00	mg/kg dry	2000	B801067	JDA	11-Jan-18	6020A	
Copper	**4.14**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**11.3**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	**0.551**	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Silver	**0.0461**	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Total Mercury by CVAA										
Mercury	<0.0256	0.0256	0.120	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10C-1 (1')

H703620-15 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**4.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	**13.9**		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
DRO >C10-C28*	**52.7**		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
EXT DRO >C28-C36	**55.4**		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*86.4 %*	*41-142*		*8010203*	MS	*12-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*86.8 %*	*37.6-147*		*8010203*	MS	*12-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10C-1 (3')

H703620-16 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**3170**		20.0	mg/kg	1	7032303	AC	10-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	10-Jan-18	310.1M	
Chloride	**4.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Sulfate	<40.0		40.0	mg/kg	4	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**2600**		4.00	mg/kg	1	7032303	AC	10-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*104 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*119 %*	*28.3-164*		*8010203*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*113 %*	*34.7-157*		*8010203*	MS	*02-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**89.4**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**12500**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**3560**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

10C-1 (3')

H703620-16 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**9760**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**1590**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**62.8**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1930**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	<31.1	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Zinc	**21.5**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**3.46**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**60.2**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.320**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**8.54**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.45**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**6.37**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	**0.259**	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Silver	**0.0470**	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Total Mercury by CVAA										
Mercury	<0.0239	0.0239	0.112	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11A (1')

H703620-17 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**4.00**		4.00	mg/kg	1	7122910	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
EXT DRO >C28-C36	**10.9**		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*90.4 %*	*41-142*		*8010203*	MS	*12-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*88.1 %*	*37.6-147*		*8010203*	MS	*12-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11A (3')

H703620-18 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**410**		20.0	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Chloride	**8.00**		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Sulfate	**3820**		500	mg/kg	50	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**336**		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*107 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*120 %*	*28.3-164*		*8010203*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*109 %*	*34.7-157*		*8010203*	MS	*02-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**89.0**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**12900**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**1800**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11A (3')

H703620-18 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**9780**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**1660**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**63.1**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**2090**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	**139**	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	J
Zinc	**21.5**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**3.48**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**46.1**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.277**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**8.94**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.54**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**6.43**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	**0.341**	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Silver	**0.0465**	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Total Mercury by CVAA										
Mercury	<0.0240	0.0240	0.112	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11A-1 (1')

H703620-19 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	02-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	02-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	02-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*116 %*	*28.3-164*		*8010203*	MS	*02-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*112 %*	*34.7-157*		*8010203*	MS	*02-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11A-1 (3')

H703620-20 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**176**		20.0	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Sulfate	**3320**		500	mg/kg	50	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**144**		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*104 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*92.8 %*	*41-142*		*8010203*	MS	*12-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*89.5 %*	*37.6-147*		*8010203*	MS	*12-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**92.0**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**9710**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**1210**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11A-1 (3')

H703620-20 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**7950**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**1190**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**54.0**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1790**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	**151**	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	J
Zinc	**17.1**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**2.51**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**37.8**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.215**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**6.55**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**1.99**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**4.90**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	**0.0316**	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Total Mercury by CVAA										
Mercury	<0.0232	0.0232	0.109	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11B (1')

H703620-21 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	04-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	04-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	04-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*103 %*	*28.3-164*		*8010203*	MS	*04-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*112 %*	*34.7-157*		*8010203*	MS	*04-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11B (3')

H703620-22 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**181**		20.0	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Sulfate	**3010**		500	mg/kg	50	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**148**		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*101 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*92.4 %*	*41-142*		*8010203*	MS	*12-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*87.6 %*	*37.6-147*		*8010203*	MS	*12-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**93.0**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**8300**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**952**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	M5

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11B (3')

H703620-22 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**7040**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**1170**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**48.5**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1560**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	**68.6**	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	J
Zinc	**14.9**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**2.64**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**24.4**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.256**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**6.45**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.01**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**5.19**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	**0.0255**	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Total Mercury by CVAA										
Mercury	<0.0230	0.0230	0.108	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11C (1')

H703620-23 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	12-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*78.8 %*	*41-142*		*8010203*	MS	*12-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*75.5 %*	*37.6-147*		*8010203*	MS	*12-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11C (3')

H703620-24 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**376**		20.0	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Chloride	**4.00**		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Sulfate	**523**		100	mg/kg	10	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**308**		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*101 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*116 %*	*28.3-164*		*8010203*	MS	*03-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*105 %*	*34.7-157*		*8010203*	MS	*03-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**91.8**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**5970**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**5960**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

11C (3')

H703620-24 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**5230**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**903**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**42.6**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1100**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	<31.1	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Zinc	**11.4**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**2.10**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**40.3**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.206**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**5.45**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.16**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**4.22**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	**0.0245**	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Total Mercury by CVAA										
Mercury	<0.0233	0.0233	0.109	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12A (1')

H703620-25 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**4.00**		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*117 %*	*28.3-164*		*8010203*	MS	*03-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*105 %*	*34.7-157*		*8010203*	MS	*03-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12A (3')

H703620-26 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**444**		20.0	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Sulfate	**3100**		500	mg/kg	50	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**364**		4.00	mg/kg	1	7032303	AC	08-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*102 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*108 %*	*28.3-164*		*8010203*	MS	*03-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*98.1 %*	*34.7-157*		*8010203*	MS	*03-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**94.1**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**6820**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**943**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12A (3')

H703620-26 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**6140**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**937**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**68.6**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1410**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	<31.1	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Zinc	**13.5**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**1.89**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**35.4**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.194**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**5.44**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.52**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**4.58**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	<0.0204	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Total Mercury by CVAA										
Mercury	<0.0227	0.0227	0.106	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12B (1')

H703620-27 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*107 %*	*28.3-164*		*8010203*	MS	*03-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*97.7 %*	*34.7-157*		*8010203*	MS	*03-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12B (3')

H703620-28 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**303**		20.0	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Sulfate	**2020**		500	mg/kg	50	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**248**		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	7122903	MS	02-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*105 %*	*72-148*		*7122903*	MS	*02-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*114 %*	*28.3-164*		*8010203*	MS	*03-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*102 %*	*34.7-157*		*8010203*	MS	*03-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**93.9**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**5780**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**703**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12B (3')

H703620-28 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**5260**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**801**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**54.1**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1180**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	**155**	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	J
Zinc	**11.3**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**1.82**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**31.3**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.153**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**5.13**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.11**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**4.03**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	<0.0204	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Total Mercury by CVAA										
Mercury	<0.0227	0.0227	0.106	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12C (1')

H703620-29 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*105 %*	*28.3-164*		*8010203*	MS	*03-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*90.4 %*	*34.7-157*		*8010203*	MS	*03-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12C (3')

H703620-30 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**288**		20.0	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Sulfate	**2090**		500	mg/kg	50	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**236**		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	8010306	MS	04-Jan-18	8021B	QR-03
Toluene*	<0.050		0.050	mg/kg	50	8010306	MS	04-Jan-18	8021B	QR-03
Ethylbenzene*	<0.050		0.050	mg/kg	50	8010306	MS	04-Jan-18	8021B	QR-03
Total Xylenes*	<0.150		0.150	mg/kg	50	8010306	MS	04-Jan-18	8021B	QR-03
Total BTEX	<0.300		0.300	mg/kg	50	8010306	MS	04-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*108 %*	*72-148*		*8010306*	MS	*04-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*101 %*	*28.3-164*		*8010203*	MS	*03-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*99.2 %*	*34.7-157*		*8010203*	MS	*03-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**92.7**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**6570**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**1150**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12C (3')

H703620-30 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**5920**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**1040**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**68.8**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1380**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	<31.1	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Zinc	**13.6**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**1.72**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**34.7**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.200**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**4.91**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.29**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**4.11**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	<0.0204	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Total Mercury by CVAA										
Mercury	<0.0230	0.0230	0.108	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12C-1 (1')

H703620-31 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	<4.00		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*116 %*	*28.3-164*		*8010203*	MS	*03-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*115 %*	*34.7-157*		*8010203*	MS	*03-Jan-18*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12C-1 (3')

H703620-32 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**239**		20.0	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Alkalinity, Carbonate	<4.00		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Chloride	**4.00**		4.00	mg/kg	1	8010301	AC	03-Jan-18	4500-Cl-B	
Sulfate	**811**		200	mg/kg	20	8011202	AC	12-Jan-18	375.4	
Alkalinity, Total	**196**		4.00	mg/kg	1	7032303	AC	05-Jan-18	310.1M	
Volatile Organic Compounds by EPA Method 8021										
Benzene*	<0.050		0.050	mg/kg	50	8010306	MS	04-Jan-18	8021B	
Toluene*	<0.050		0.050	mg/kg	50	8010306	MS	04-Jan-18	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	8010306	MS	04-Jan-18	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	8010306	MS	04-Jan-18	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	8010306	MS	04-Jan-18	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*72-148*		*8010306*	MS	*04-Jan-18*	*8021B*	
Petroleum Hydrocarbons by GC FID										
GRO C6-C10*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	8010203	MS	03-Jan-18	8015B	
Surrogate: 1-Chlorooctane			*118 %*	*28.3-164*		*8010203*	MS	*03-Jan-18*	*8015B*	
Surrogate: 1-Chlorooctadecane			*119 %*	*34.7-157*		*8010203*	MS	*03-Jan-18*	*8015B*	
Green Analytical Laboratories										
General Chemistry										
% Dry Solids	**94.4**			%	1	B801034	LLG	04-Jan-18	EPA160.3/16 84	
Total Metals by ICP										
Aluminum	**5100**	1.35	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Calcium	**1260**	6.32	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

12C-1 (3')

H703620-32 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Green Analytical Laboratories										
Total Metals by ICP										
Iron	**4920**	6.72	10.0	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Magnesium	**888**	3.45	100	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Manganese	**61.2**	2.89	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Potassium	**1090**	21.5	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Sodium	<31.1	31.1	200	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Zinc	**11.1**	2.40	5.00	mg/kg dry	100	B801066	JDA	11-Jan-18	6010B	
Total Metals by ICPMS										
Arsenic	**1.40**	0.460	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Barium	**28.9**	0.268	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Cadmium	**0.155**	0.0951	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	J
Chromium	**4.09**	0.548	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Copper	**2.27**	0.203	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Lead	**3.53**	0.0810	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Selenium	<0.252	0.252	1.00	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Silver	<0.0204	0.0204	0.500	mg/kg dry	1000	B801067	JDA	11-Jan-18	6020A	
Total Mercury by CVAA										
Mercury	<0.0226	0.0226	0.106	mg/kg dry	500	B801018	LLG	05-Jan-18	EPA7471	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7032303 - 1:1 DI										
Blank (7032303-BLK1)				Prepared & Analyzed: 22-Mar-17						
Alkalinity, Carbonate	ND	1.00	mg/kg							
Alkalinity, Bicarbonate	5.00	5.00	mg/kg							
Alkalinity, Total	4.00	1.00	mg/kg							
LCS (7032303-BS1)				Prepared & Analyzed: 22-Mar-17						
Alkalinity, Carbonate	ND	1.00	mg/kg				80-120			
Alkalinity, Bicarbonate	122	5.00	mg/kg				80-120			
Alkalinity, Total	100	1.00	mg/kg	100		100	80-120			
LCS Dup (7032303-BSD1)				Prepared & Analyzed: 22-Mar-17						
Alkalinity, Carbonate	ND	1.00	mg/kg				80-120		20	
Alkalinity, Bicarbonate	132	5.00	mg/kg				80-120	7.87	20	
Alkalinity, Total	108	1.00	mg/kg	100		108	80-120	7.69	20	
Batch 7122910 - 1:4 DI Water										
Blank (7122910-BLK1)				Prepared & Analyzed: 29-Dec-17						
Chloride	ND	16.0	mg/kg							
LCS (7122910-BS1)				Prepared & Analyzed: 29-Dec-17						
Chloride	400	16.0	mg/kg	400		100	80-120			
LCS Dup (7122910-BSD1)				Prepared & Analyzed: 29-Dec-17						
Chloride	464	16.0	mg/kg	400		116	80-120	14.8	20	
Batch 8010301 - 1:4 DI Water										
Blank (8010301-BLK1)				Prepared & Analyzed: 03-Jan-18						
Chloride	ND	16.0	mg/kg							

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8010301 - 1:4 DI Water										
LCS (8010301-BS1)				Prepared & Analyzed: 03-Jan-18						
Chloride	448	16.0	mg/kg	400		112	80-120			
LCS Dup (8010301-BSD1)				Prepared & Analyzed: 03-Jan-18						
Chloride	448	16.0	mg/kg	400		112	80-120	0.00	20	
Batch 8011202 - 1:1 DI										
Blank (8011202-BLK1)				Prepared & Analyzed: 12-Jan-18						
Sulfate	ND	10.0	mg/kg							
LCS (8011202-BS1)				Prepared & Analyzed: 12-Jan-18						
Sulfate	23.2	10.0	mg/kg	20.0		116	80-120			
LCS Dup (8011202-BSD1)				Prepared & Analyzed: 12-Jan-18						
Sulfate	23.6	10.0	mg/kg	20.0		118	80-120	1.96	20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 7122903 - Volatiles										
Blank (7122903-BLK1)				Prepared: 29-Dec-17 Analyzed: 02-Jan-18						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0989*		mg/kg	*0.100*		*98.9*	*72-148*			
LCS (7122903-BS1)				Prepared: 29-Dec-17 Analyzed: 02-Jan-18						
Benzene	1.68	0.050	mg/kg	2.00		83.9	79.5-124			
Toluene	1.65	0.050	mg/kg	2.00		82.4	75.5-127			
Ethylbenzene	1.74	0.050	mg/kg	2.00		86.8	77.7-125			
Total Xylenes	5.18	0.150	mg/kg	6.00		86.3	70.9-124			
Surrogate: 4-Bromofluorobenzene (PID)	*0.102*		mg/kg	*0.100*		*102*	*72-148*			
LCS Dup (7122903-BSD1)				Prepared: 29-Dec-17 Analyzed: 02-Jan-18						
Benzene	1.71	0.050	mg/kg	2.00		85.7	79.5-124	2.04	6.5	
Toluene	1.73	0.050	mg/kg	2.00		86.7	75.5-127	5.06	7.02	
Ethylbenzene	1.81	0.050	mg/kg	2.00		90.7	77.7-125	4.36	7.83	
Total Xylenes	5.34	0.150	mg/kg	6.00		89.0	70.9-124	3.02	7.78	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0981*		mg/kg	*0.100*		*98.1*	*72-148*			
Batch 8010306 - Volatiles										
Blank (8010306-BLK1)				Prepared: 03-Jan-18 Analyzed: 04-Jan-18						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.104*		mg/kg	*0.100*		*104*	*72-148*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8010306 - Volatiles										
LCS (8010306-BS1)				Prepared: 03-Jan-18 Analyzed: 04-Jan-18						
Benzene	2.07	0.050	mg/kg	2.00		104	79.5-124			
Toluene	2.06	0.050	mg/kg	2.00		103	75.5-127			
Ethylbenzene	2.07	0.050	mg/kg	2.00		103	77.7-125			
Total Xylenes	6.00	0.150	mg/kg	6.00		99.9	70.9-124			
Surrogate: 4-Bromofluorobenzene (PID)	*0.102*		mg/kg	*0.100*		*102*	*72-148*			
LCS Dup (8010306-BSD1)				Prepared: 03-Jan-18 Analyzed: 04-Jan-18						
Benzene	2.16	0.050	mg/kg	2.00		108	79.5-124	3.98	6.5	
Toluene	2.15	0.050	mg/kg	2.00		107	75.5-127	4.10	7.02	
Ethylbenzene	2.15	0.050	mg/kg	2.00		107	77.7-125	3.94	7.83	
Total Xylenes	6.22	0.150	mg/kg	6.00		104	70.9-124	3.63	7.78	
Surrogate: 4-Bromofluorobenzene (PID)	*0.103*		mg/kg	*0.100*		*103*	*72-148*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8010202 - General Prep - Organics										
Blank (8010202-BLK1)				Prepared & Analyzed: 02-Jan-18						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*41.8*		mg/kg	*50.0*		*83.6*	*28.3-164*			
Surrogate: 1-Chlorooctadecane	*32.1*		mg/kg	*50.0*		*64.2*	*34.7-157*			
LCS (8010202-BS1)				Prepared & Analyzed: 02-Jan-18						
GRO C6-C10	163	10.0	mg/kg	200		81.6	76.6-119			
DRO >C10-C28	188	10.0	mg/kg	200		93.9	81.4-124			
Surrogate: 1-Chlorooctane	*47.0*		mg/kg	*50.0*		*94.0*	*28.3-164*			
Surrogate: 1-Chlorooctadecane	*35.1*		mg/kg	*50.0*		*70.2*	*34.7-157*			
LCS Dup (8010202-BSD1)				Prepared & Analyzed: 02-Jan-18						
GRO C6-C10	156	10.0	mg/kg	200		77.9	76.6-119	4.68	7.94	
DRO >C10-C28	178	10.0	mg/kg	200		88.9	81.4-124	5.54	9.83	
Surrogate: 1-Chlorooctane	*45.0*		mg/kg	*50.0*		*89.9*	*28.3-164*			
Surrogate: 1-Chlorooctadecane	*34.4*		mg/kg	*50.0*		*68.9*	*34.7-157*			
Batch 8010203 - General Prep - Organics										
Blank (8010203-BLK1)				Prepared & Analyzed: 02-Jan-18						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*63.3*		mg/kg	*50.0*		*127*	*28.3-164*			
Surrogate: 1-Chlorooctadecane	*62.3*		mg/kg	*50.0*		*125*	*34.7-157*			
LCS (8010203-BS1)				Prepared: 02-Jan-18 Analyzed: 04-Jan-18						
GRO C6-C10	233	10.0	mg/kg	200		117	76.6-119			
DRO >C10-C28	235	10.0	mg/kg	200		118	81.4-124			
Surrogate: 1-Chlorooctane	*58.3*		mg/kg	*50.0*		*117*	*28.3-164*			
Surrogate: 1-Chlorooctadecane	*53.8*		mg/kg	*50.0*		*108*	*34.7-157*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8010203 - General Prep - Organics										
LCS Dup (8010203-BSD1)				Prepared: 02-Jan-18 Analyzed: 04-Jan-18						
GRO C6-C10	237	10.0	mg/kg	200		119	76.6-119	1.65	7.94	
DRO >C10-C28	241	10.0	mg/kg	200		120	81.4-124	2.28	9.83	
Surrogate: 1-Chlorooctane	*56.9*		mg/kg	*50.0*		*114*	*28.3-164*			
Surrogate: 1-Chlorooctadecane	*54.9*		mg/kg	*50.0*		*110*	*34.7-157*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

General Chemistry - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B801034 - General Prep - Wet Chem										
Duplicate (B801034-DUP2)		**Source: H703620-20**		Prepared & Analyzed: 04-Jan-18						
% Dry Solids	92.0		%		92.0			0.0402	20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Total Metals by ICP - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B801066 - EPA 3050										
Blank (B801066-BLK1)				Prepared: 10-Jan-18 Analyzed: 11-Jan-18						
Iron	ND	10.0	mg/kg dry							
Calcium	9.12	100	mg/kg dry							J
Zinc	ND	5.00	mg/kg dry							
Aluminum	3.16	5.00	mg/kg dry							J
Magnesium	ND	100	mg/kg dry							
Manganese	ND	5.00	mg/kg dry							
Potassium	ND	200	mg/kg dry							
Sodium	ND	200	mg/kg dry							
LCS (B801066-BS1)				Prepared: 10-Jan-18 Analyzed: 11-Jan-18						
Manganese	201	5.00	mg/kg dry	200		100	80-120			
Zinc	178	5.00	mg/kg dry	200		89.2	80-120			
Potassium	803	200	mg/kg dry	800		100	80-120			
Sodium	643	200	mg/kg dry	648		99.2	80-120			
Iron	386	10.0	mg/kg dry	400		96.6	80-120			
Magnesium	1950	100	mg/kg dry	2000		97.7	80-120			
Calcium	411	100	mg/kg dry	400		103	80-120			
Aluminum	394	5.00	mg/kg dry	400		98.6	80-120			
LCS Dup (B801066-BSD1)				Prepared: 10-Jan-18 Analyzed: 11-Jan-18						
Magnesium	1940	100	mg/kg dry	2000		96.8	80-120	0.891	20	
Potassium	800	200	mg/kg dry	800		100	80-120	0.394	20	
Sodium	641	200	mg/kg dry	648		98.9	80-120	0.346	20	
Calcium	402	100	mg/kg dry	400		100	80-120	2.26	20	
Aluminum	394	5.00	mg/kg dry	400		98.4	80-120	0.195	20	
Manganese	198	5.00	mg/kg dry	200		98.9	80-120	1.34	20	
Zinc	177	5.00	mg/kg dry	200		88.5	80-120	0.874	20	
Iron	384	10.0	mg/kg dry	400		96.0	80-120	0.653	20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Total Metals by ICPMS - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B801067 - EPA 3050M										
Blank (B801067-BLK1)				Prepared: 10-Jan-18 Analyzed: 11-Jan-18						
Selenium	ND	0.100	mg/kg dry							
Arsenic	ND	0.100	mg/kg dry							
Cadmium	ND	0.0500	mg/kg dry							
Chromium	ND	0.100	mg/kg dry							
Silver	ND	0.0500	mg/kg dry							
Lead	ND	0.0500	mg/kg dry							
Barium	0.0443	0.0500	mg/kg dry							J
Copper	ND	0.0500	mg/kg dry							
LCS (B801067-BS1)				Prepared: 10-Jan-18 Analyzed: 11-Jan-18						
Copper	5.04	0.0500	mg/kg dry	5.00		101	80-120			
Lead	5.18	0.0500	mg/kg dry	5.00		104	80-120			
Barium	5.13	0.0500	mg/kg dry	5.00		103	80-120			
Cadmium	4.78	0.0500	mg/kg dry	5.00		95.6	80-120			
Chromium	5.29	0.100	mg/kg dry	5.00		106	80-120			
Selenium	22.2	0.100	mg/kg dry	25.0		88.6	80-120			
Silver	5.15	0.0500	mg/kg dry	5.00		103	80-120			
Arsenic	4.67	0.100	mg/kg dry	5.00		93.5	80-120			
LCS Dup (B801067-BSD1)				Prepared: 10-Jan-18 Analyzed: 11-Jan-18						
Cadmium	4.91	0.0500	mg/kg dry	5.00		98.1	80-120	2.65	20	
Chromium	5.26	0.100	mg/kg dry	5.00		105	80-120	0.561	20	
Selenium	22.5	0.100	mg/kg dry	25.0		90.1	80-120	1.68	20	
Arsenic	4.71	0.100	mg/kg dry	5.00		94.2	80-120	0.745	20	
Silver	5.22	0.0500	mg/kg dry	5.00		104	80-120	1.31	20	
Copper	5.02	0.0500	mg/kg dry	5.00		100	80-120	0.556	20	
Barium	5.30	0.0500	mg/kg dry	5.00		106	80-120	3.09	20	
Lead	5.23	0.0500	mg/kg dry	5.00		105	80-120	1.09	20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

JOHN H. HENDRIX CORPORATION P. O. BOX 3040 MIDLAND TX, 79702	Project: JHHC SWMF NM-02-0021 Project Number: JHHC Project Manager: CAROLYN HAYNES Fax To: (575) 394-2653	Reported: 07-Mar-18 16:56

Total Mercury by CVAA - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B801018 - EPA 7471										
Blank (B801018-BLK1)				Prepared: 04-Jan-18 Analyzed: 05-Jan-18						
Mercury	ND	0.0002	mg/kg wet							
LCS (B801018-BS1)				Prepared: 04-Jan-18 Analyzed: 05-Jan-18						
Mercury	0.0020	0.0002	mg/kg wet	0.00200		98.0	85-115			
LCS Dup (B801018-BSD1)				Prepared: 04-Jan-18 Analyzed: 05-Jan-18						
Mercury	0.0020	0.0002	mg/kg wet	0.00200		102	85-115	3.56	20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
M5	Sample was chosen for matrix spike. Spike recovery did not meet laboratory acceptance criteria, possible matrix interference in sample.
J	Estimated conentration. Analyte concentration between MDL and RL.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # H703620

Company Name: John H. Hendrix Corporation	BILL TO Company: John H. Hendrix Corporation PO#
Project Manager: Carolyn Haynes	Project Manager: Carolyn Haynes
Address: (Street, City, Zip) PO Box 910, Eunice NM 88231	Address: (Street, City, Zip) PO Box 3040, Midland TX 79702-3040 Fax#:
Phone #: (575) 394-2649 Fax#: (575) 394-2653	Phone #: (432) 684-6631 Email: cdoranhaynes@jhhc.org
Project #: John H. Hendrix Corporation	Project Name: JHHC Surface Waste Management Facility (NM-02-0021)
Project Location: T24S, R36E, Sec 15, W/2 NW/4 & W/2 SW/4, Lea County NM	Sampler Name: Gil Van Deventer

LAB # (LAB USE ONLY) H703620	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO_3	$NaHSO_4$	H_2SO_4	ICE	None	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021 B	TPH 8015M (Extended to C36 - ORO)	PAH 8270C	RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	WQCC Metals: Al Cu Fe Mn Zn	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, K, Na)	Anions (Cl, SO4, CO3, HCO3, T-ALK)	Total Dissolved Solids (SM2540C)	Chlorides (SM4500 B or 300.1)	SPLP Chloride	Turn Around Time ~ 24 Hours
1	1A (1')	C	1		X							X		12/28/17	0925			X														X		
2	1A (3')	G	1		X							X		12/28/17	0935		X	X		X	X								X	X		X		
3	1A-1 (1')	C	1		X							X		12/28/17	0940			X														X		
4	1A-1 (3')	G	1		X							X		12/28/17	0950		X	X		X	X								X	X		X		
5	1B (1')	C	1		X							X		12/28/17	1020			X														X		
6	1B (3')	G	1		X							X		12/28/17	1030		X	X		X	X								X	X		X		
7	1C (1')	C	1		X							X		12/28/17	1040			X														X		
8	1C (3')	G	1		X							X		12/28/17	1050		X	X		X	X								X	X		X		
9	10B (1')	C	1		X							X		12/28/17	1200			X														X		
10	10B (3')	G	1		X							X		12/28/17	1210		X	X		X	X								X	X		X		

ANALYSIS REQUEST

(Circle or Specify Method No.)

Relinquished by:	Date: 12/28/17	Time: 6:00 pm	Received by:	Date: 12/28/17	Time: 6:05 pm
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff)	Date:	Time:

Phone Results: Yes No

Fax Results: Yes No Additional Fax Number:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Sample Condition: #25 1.2c corrected 4c — Cool: Yes — Intact: Yes

CHECKED BY: (Initials) TO

REMARKS: TPH extended to C-36

Email Results to:

cdoranhaynes@jhhc.org
gil@trident-environmental.com

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # H703620

Company Name: John H. Hendrix Corporation	BILL TO Company: John H. Hendrix Corporation PO#
Project Manager: Carolyn Haynes	Project Manager: Carolyn Haynes
Address: (Street, City, Zip) PO Box 910, Eunice NM 88231	Address: (Street, City, Zip) PO Box 3040, Midland TX 79702-3040 Fax#:
Phone #: (575) 394-2649 Fax#: (575) 394-2653	Phone #: (432) 684-6631 Email: cdoranhaynes@jhhc.org
Project #: John H. Hendrix Corporation	Project Name: JHHC Surface Waste Management Facility (NM-02-0021)
Project Location: T24S, R36E; Sec 15, W/2 NW/4 & W/2 SW/4, Lea County NM	Sampler Name: Gil Van Deventer

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO_3	$NaHSO_4$	H_2SO_4	ICE	None		SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021 B	TPH 8015M (Extended to C36)	PAH 8270C	RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	WQCC Metals: Al Cu Fe Mn Zn	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, K, Na)	Anions (Cl, SO4, CO3, HCO3, T-ALK)	Total Dissolved Solids (SM2540C)	Chlorides (SM4500 B or 300.1)	SPLP Chloride	Turn Around Time ~ 24 Hours
H703620																																	
11	10B-1 (1')	C	1		X							X			12/28/17	1220			X														X	
12	10B-1 (3')	G	1		X							X			12/28/17	1230		X	X		X	X								X	X		X	
13	10C (1')	C	1		X							X			12/28/17	1110			X														X	
14	10C (3')	G	1		X							X			12/28/17	1120		X	X		X	X								X	X		X	
15	10C-1 (1')	C	1		X							X			12/28/17	1130			X														X	
16	10C-1 (3')	G	1		X							X			12/28/17	1140		X	X		X	X								X	X		X	
17	11A (1')	C	1		X							X			12/28/17	1340			X														X	
18	11A (3')	G	1		X							X			12/28/17	1350		X	X		X	X								X	X		X	
19	11A-1 (1')	C	1		X							X			12/28/17	1405			X														X	
20	11A-1 (3')	G	1		X							X			12/28/17	1415		X	X		X	X								X	X		X	

Relinquished by: Date: 12/28/17 Time: 6:00p
Received by: Date: 12/28/17 Time: 6:05pm

Relinquished by: Date: Time:
Received By: (Laboratory Staff) Date: Time:

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: 1.2 Corrected 1.4 #175
Cool: Yes / No
Intact: Yes / No
CHECKED BY: (Initials) T.O

Phone Results: Yes / No
Fax Results: Yes / No Additional Fax Number:

REMARKS: TPH extended to C-36

Email Results to:
cdoranhaynes@jhhc.org
gil@trident-environmental.com

ANALYSIS REQUEST
(Circle or Specify Method No.)

101 East Marland - Hobbs, New Mexico 88240
Tel (575) 393-2326
Fax (575) 393-2476

Cardinal Laboratories, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # H703620

Company Name: John H. Hendrix Corporation	BILL TO Company: John H. Hendrix Corporation PO#
Project Manager: Carolyn Haynes	Project Manager: Carolyn Haynes
Address: (Street, City, Zip) PO Box 910, Eunice NM 88231	Address: (Street, City, Zip) PO Box 3040, Midland TX 79702-3040 Fax#:
Phone #: (575) 394-2649 Fax#: (575) 394-2653	Phone #: (432) 684-6631 Email: cdoranhaynes@jhhc.org
Project #: John H. Hendrix Corporation	Project Name: JHHC Surface Waste Management Facility (NM-02-0021)
Project Location: T24S, R36E, Sec 15, W/2 NW/4 & W/2 SW/4, Lea County NM	Sampler Name: Gil Van Deventer

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	(G)rab or (C)omp	# CONTAINERS	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO_3	$NaHSO_4$	H_2SO_4	ICE	None	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021 B	TPH 8015M (Extended to C36)	PAH 8270C	RCRA Metals: Ag As Ba Cd Cr Pb Se Hg	WQCC Metals: Al Cu Fe Mn Zn	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	Moisture Content	Cations (Ca, Mg, K, Na)	Anions (Cl, SO4, CO3, HCO3, T-ALK)	Total Dissolved Solids (SM2540C)	Chlorides (SM4500 B or 300.1)	SPLP Chloride	Turn Around Time ~ 24 Hours
21	11B (1')	C	1		X							X		12/28/17	1320			X														X		
22	11B (3')	G	1		X							X		12/28/17	1330		X	X		X	X								X	X		X		
23	11C (1')	C	1		X							X		12/28/17	1250			X														X		
24	11C (3')	G	1		X							X		12/28/17	1300		X	X		X	X								X	X		X		
25	12A (1')	C	1		X							X		12/28/17	1430			X														X		
26	12A (3')	G	1		X							X		12/28/17	1440		X	X		X	X								X	X		X		
27	12B (1')	C	1		X							X		12/28/17	1500			X														X		
28	12B (3')	G	1		X							X		12/28/17	1510		X	X		X	X								X	X		X		
29	12C (1')	C	1		X							X		12/28/17	1520			X														X		
30	12C (3')	G	1		X							X		12/28/17	1530		X	X		X	X								X	X		X		
31	12C-1 (1')	C	1		X							X		12/28/17	1540			X														X		
32	12C-1 (3')	G	1		X							X		12/28/17	1550		X	X		X	X								X	X		X		

Relinquished by:	Date: 12/28/17	Time: 6:00	Received by: Date: 12/28/17 Time: 6:05
Relinquished by:	Date:	Time:	Received By: (Laboratory Staff) Date: Time:

Phone Results: Yes / No
Fax Results: Yes / No Additional Fax Number:

REMARKS: TPH extended to C-36

Email Results to:
cdoranhaynes@jhhc.org
gil@trident-environmental.com

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Sample Condition: 1.2° Corrected 0.4° #35 — Cool: Yes / Intact: Yes — No / No

CHECKED BY: (Initials) TO