



January 15, 2020

Reference No. 088210-84

Mr. Bradford Billings  
Environmental Specialist  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

Dear Mr. Billings:

**Re: Site Assessment Summary and Closure Request  
Galaxy to Hearn Lay Flat Release Site  
Remediation Permit Number 1RP-5236  
Lea County, New Mexico**

Dear Mr. Billings:

GHD Services, Inc. (GHD), on behalf of EOG Resources (EOG), respectfully submits this Assessment Summary and Site Closure request to the New Mexico Oil Conservation Division (NMOCD) for the Remediation Permit Number 1RP-5236. This report provides documentation detailing delineation, soil sampling, remediation and restoration activities at the Galaxy to Hearn Lay Flat release (Site) located in NW/NE quarter (Unit Letter D) of Section 27, T-24-S, R-33E on surface lands administered by the State of New Mexico. The Site is located in Lea County, approximately 22 miles west of Jal, New Mexico. GPS coordinates for the Site are 32.19420N, -103.56710 W (Figure 1).

## 1. Release Information and Response Activities

On September 29, 2018, a release of approximately 258 barrels (bbls) of reuse water was discovered at the Site. The release occurred when a reuse water transfer line developed a pinhole. The release traveled along Diamond Road and also along a pipeline ROW for approximately 1,000 feet (ft.). A vacuum truck was able to recover approximately 75 bbls. The spill dimensions were calculated to be approximately 1,000 ft. x 5 ft. wide by one ft. depth. EOG reported the release to the NMOCD on a Release Notification form C-141 that was received by NMOCD District 1 on October 16, 2018. The release was assigned a Remediation Permit (RP) Number 1RP-5236. A copy of the C-141 Release Notification is included in Appendix A.

## 2. Regulatory Framework

GHD characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter, 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be between 50 and 100 ft. below ground surface (bgs) based on the nearest water well data collected from the United States Geological Survey (USGS, Appendix B). There are two wells located approximately 1.5 miles north and south of the site with depths to groundwater of 94 and 97 ft. bgs, respectively. A depth to water of between 50 and 100 ft. bgs is also interpreted from the Chevron Texaco Lea County trend map. The lateral extents of the release are greater than 200 ft. of any lakebed, sinkhole, or playa lake and greater than 300 ft. from an occupied residence, school, hospital, institution,



church or wetland. A review of USGS topography maps however indicate the release area is within 300 ft. of a significant watercourse as defined in 19.15.17.7 NMAC. The watercourse is very faint, however, in proximity of the Site and is separated by the raised Diamond Road roadbed. The Site is greater than 1,000 ft. to a freshwater well or spring and is not within a 100-year floodplain or over-lying a subsurface mine. The Site is located in a low karst area. From the NMAC Table 1, the significant watercourse proximity places the Site into the less than 50 ft. to groundwater category. A USGS radius map is presented in Appendix C.

Based on these criteria, the following numerical limits on Table 1 to 19.15.29.12 NMAC closure criteria apply:

Depth to groundwater ≤ 50 feet	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

### 3. Soil Assessment and Remediation

Prior to initiation of field activities a Right of Entry permit was obtained from the New Mexico State Land Office and a literature and file search was conducted in October 2018, using the State of New Mexico's Archaeological Resources Management System. The Site was cleared for field work after review of existing cultural resource surveys of the area.

Soil assessment and remediation activities were conducted on-Site over several phases. Initial phase being from March 29 through May 15, 2019. Prior to initiating any subsurface activities, a Utility Locate (One-Call) was submitted 48 hours in advance to notify companies with subsurface utilities in the area of the proposed intrusive assessment. A total 45 soil samples were analyzed to assess the horizontal and vertical extent from the approximate 258 (bbl) release.

#### 3.1 Initial Assessment Sampling

GHD and EOG's contractor SDR first mobilized to the Site on April 29, 2019 to assess the nature and extent of the release. Surface staining was observed in the release area immediately adjacent to Diamond Road and travelling south across an east-west access road and then south along an access road parallel to Diamond Road for a total of approximately 1000 feet (ft.). Hand auger borings were dug at 12 locations along the visibly stained release area (Fig. 2) to a depth of one ft. On April 30 and May 1, 2019, a backhoe was used to further assess subsurface conditions at depths of from two to four ft. below surface grade (bgs). Samples were collected from locations all along the length of the release area. Samples were submitted to Hall Environmental Analysis Laboratory (Hall) for analysis of chloride by EPA Method 300.

#### 3.2 Continued Soil Assessment, Excavation and Confirmation Sampling

Laboratory results from the initial Site assessment indicated that further excavation immediately adjacent to the busy roadway would be necessary. As a safety precaution, a traffic control plan was developed to provide for proper signage north and south of the planned excavation area. Once in place, GHD and SDR returned to



the Site to in July 2019 to further assess impacts and to excavate impacted materials down to soil concentrations below the established closure criteria. Between July 16 and August 13, 2019, 62 additional assessment and confirmation samples were collected. The excavation was focused on two areas immediately adjacent to Diamond Road and three areas on the north-south access road just east of the Diamond Road. Impacted areas were excavated to depths of three to four ft. bgs. Confirmation samples were collected as the excavations proceeded until all results were below the closure criteria. Samples were again submitted under chain of custody protocol to Hall for analysis of chloride by EPA Method 300.0. All final sample results were below the determined closure criteria for the Site.

The horizontal and vertical excavation extent limits, sample locations and analytical results are presented in Figures 2 and 3 and summarized on Table 1. Laboratory analytical reports are included in Appendix D.

### **3.2 Site Remediation, Waste Management and Restoration Activities**

Between July 27 and August 30, 2019, SDR completed the offsite hauling and transportation of the impacted materials for disposal to the Sundance facility near Eunice, New Mexico. Approximately 600 cubic yards of impacted soils were loaded onto haul trucks and transported to the R360 facility for disposal. Excavated areas were backfilled with clean soils, compacted and regraded to pre-investigation elevations.

A photographic log documenting Site conditions during excavation, backfilling and remediation activities is provided in Appendix E. Waste hauling manifests are included in Appendix F.

## **4. Closure Request-1RP-5236GAa**

The marginal significant watercourse west of the Site was always protected from the release of reuse water from by the raised county roadway. Based on this circumstance, a greater than 51 ft. depth to groundwater, the removal of 600 cubic yards of impacted soils and analyses of 105 soil samples, GHD and EOG believe the remedial actions to date are protective of human health and the environment and request Site closure and No Further Action status be granted for the 2RP-5236 release.

Sincerely,

GHD

A handwritten signature in blue ink that reads "Justin Nixon".

Justin Nixon  
Project Manager

A handwritten signature in blue ink that reads "Jeff Walker".

Jeff Walker  
Senior Project Manager

TL/1

#### **Attachments:**

- Figure 1 – Site Location Map
- Figure 2 – Assessment Sample Location Map
- Figure 3 – Confirmation Sample Location Map
- Table 1 – Soil Analytical Data Summary – Confirmation Sampling
- Appendix A - NMOCD C-141 Form (1RP-5236)
- Appendix B - USGS Water Well Information



Appendix C – USGS Radius Map  
Appendix D - Analytical Laboratory Reports  
Appendix E - Photographic Log  
Appendix F – Waste Disposal Manifests



## Figures



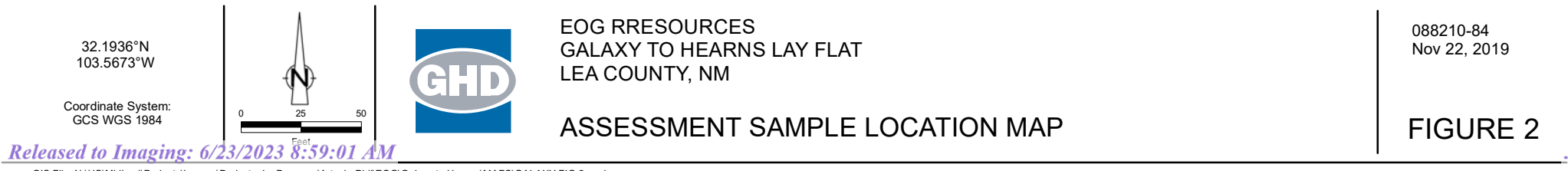


## SITE LOCATION MAP

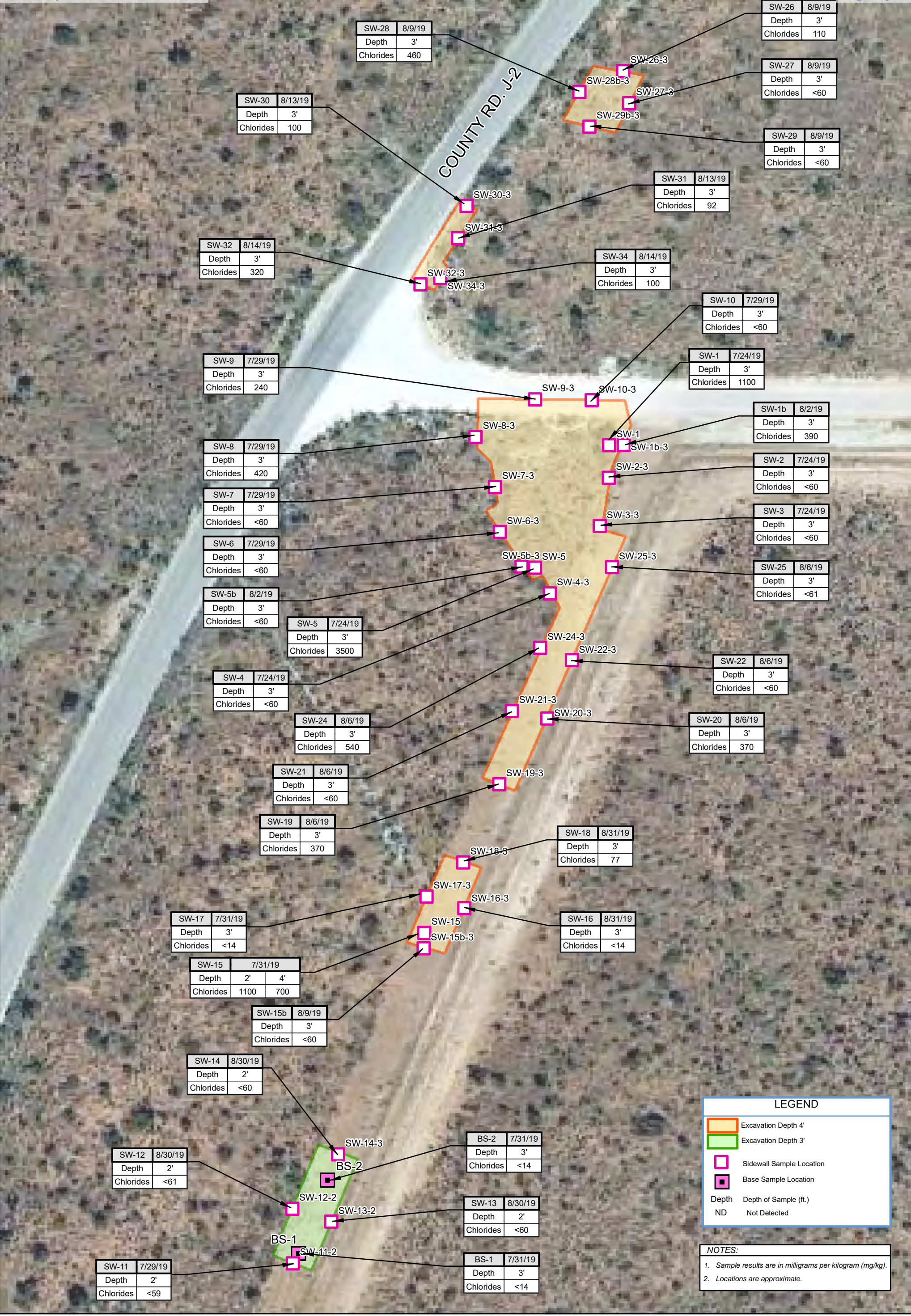
FIGURE 1

GIS File: N:\US\Midland\Legacy\Projects In Progress\Artesia-Phil\EOG\Galaxy to Hearn\MAPS\GALAXY FIG.1.mxd











Table

**Table 1**  
**Summary of Soil Analytical Data**  
**Galaxy to Hearn Lay Flat**

Page 1 of 3

Sample ID	Depth (feet)	Date	Chloride
S-088210-84-042919-JP-HA-1-1'	1	4/29/2019	310
S-088210-84-042919-JP-HA-2-1'	1	4/29/2019	360
S-088210-84-042919-JP-HA-3-1'	1	4/29/2019	<63
S-088210-84-042919-JP-HA-4-1'	1	4/29/2019	140
S-088210-84-042919-JP-HA-5-1'	1	4/29/2019	<76
S-088210-84-042919-JP-HA-6-1'	1	4/29/2019	<69
S-088210-84-042919-JP-HA-7-1'	1	4/29/2019	<69
S-088210-84-042919-JP-HA-8-1'	1	4/29/2019	<73
S-088210-84-042919-JP-HA-9-1'	1	4/29/2019	1800
S-088210-84-042919-JP-HA-10-1'	1	4/29/2019	<70
S-088210-84-042919-JP-HA-11-1'	1	4/29/2019	<64
S-088210-84-042919-JP-HA-12-1'	1	4/29/2019	ND
S-088210-84-071719-JP-TP-1-2'	2	7/17/2019	130
S-088210-84-071719-JP-TP-1-4'	4	7/17/2019	290
S-088210-84-071719-JP-TP-2-2'	2	7/17/2019	<59
S-088210-84-071719-JP-TP-2-4'	4	7/17/2019	91
S-088210-84-071719-JP-TP-3-2'	2	7/17/2019	<60
S-088210-84-071719-JP-TP-3-4'	4	7/17/2019	240
S-088210-84-071719-JP-TP-4-2'	2	7/17/2019	130
S-088210-84-071719-JP-TP-4-4'	4	7/17/2019	960
S-088210-84-072919-JP-TP-5-2'	2	7/29/2019	120
S-088210-84-072919-JP-TP-5-4'	4	7/29/2019	260
S-088210-84-050119-PL-TP-6-2'	2	5/1/2019	<67
S-088210-84-050119-PL-TP-6-3'	3	5/1/2019	390
S-088210-84-050119-PL-TP-7-2'	2	5/1/2019	810
S-088210-84-050119-PL-TP-8-1'	1	5/1/2019	<63
S-088210-84-050119-PL-TP-9-2'	2	5/1/2019	<67
S-088210-84-050119-PL-TP-9-4'	4	5/1/2019	<68
S-088210-84-050119-PL-TP-10-2'	2	5/1/2019	<67
S-088210-84-050119-PL-TP-10-3'	3	5/1/2019	<70
S-088210-84-050119-PL-TP-11-2'	2	5/1/2019	330
S-088210-84-043019-JP-TP-12-2'	2	4/30/2019	150
S-088210-84-043019-JP-TP-12-3'	3	4/30/2019	160
S-088210-84-043019-JP-TP-13-2'	2	4/30/2019	380
S-088210-84-043019-JP-TP-13-3'	3	4/30/2019	1600
S-088210-84-043019-JP-TP-14-2'	2	4/30/2019	1100
S-088210-84-043019-JP-TP-14-3'	3	4/30/2019	1700
S-088210-84-043019-JP-TP-15-2'	2	4/30/2019	1900
S-088210-84-043019-JP-TP-15-3'	3	4/30/2019	2700
S-088210-84-043019-JP-TP-16-2'	2	4/30/2019	1300
S-088210-84-043019-JP-TP-16-3'	3	4/30/2019	260
S-088210-84-043019-JP-TP-17-2'	2	4/30/2019	1900
S-088210-84-043019-JP-TP-17-3'	3	4/30/2019	220
S-088210-84-043019-JP-TP-18-2'	2	4/30/2019	2500

GHD-088210-84

**Table 1**  
**Summary of Soil Analytical Data**  
**Galaxy to Hearn Lay Flat**

Page 2 of 3

Sample ID	Depth (feet)	Date	Chloride
S-088210-84-043019-JP-TP-18-3'	3	4/30/2019	1900
S-088210-84-043019-JP-TP-19-2'	2	4/30/2019	130
S-088210-84-043019-JP-TP-19-3'	3	4/30/2019	330
S-088210-84-043019-JP-TP-20-2'	2	4/30/2019	680
S-088210-84-043019-JP-TP-20-4'	4	4/30/2019	<65
S-088210-84-043019-JP-TP-21-2'	2	4/30/2019	<66
S-088210-84-043019-JP-TP-21-3'	3	4/30/2019	240
S-088210-84-051119-PL-TP-22-2'	2	5/1/2019	<66
S-088210-84-050119-PL-TP-22-3'	3	5/1/2019	<64
S-088210-84-071619-JP-TP-23-2'	2	7/16/2019	700
S-088210-84-071619-JP-TP-23-4'	4	7/16/2019	590
S-088210-84-071619-JP-TP-24-2'	2	7/16/2019	220
S-088210-84-071619-JP-TP-24-4'	4	7/16/2019	<60
S-088210-84-071619-JP-TP-25-2'	2	7/16/2019	360
S-088210-84-071619-JP-TP-25-4'	4	7/16/2019	290
S-088210-84-071619-JP-TP-26-2'	2	7/16/2019	<60
S-088210-84-071619-JP-TP-26-4'	4	7/16/2019	98
S-088210-84-071619-JP-TP-27-2'	2	7/16/2019	580
S-088210-84-071619-JP-TP-27-4'	4	7/16/2019	140
S-088210-84-071619-JP-TP-28-2'	2	7/16/2019	<60
S-088210-84-071619-JP-TP-28-4'	4	7/16/2019	<60
S-088210-84-071619-JP-TP-29-2'	2	7/16/2019	130
S-088210-84-071619-JP-TP-29-4'	4	7/16/2019	220
S-088210-84-071619-JP-TP-30-2'	2	7/16/2019	690
S-088210-84-071619-JP-TP-30-4'	4	7/16/2019	1700
S-088210-84-071619-JP-TP-31-2'	2	7/16/2019	61
S-088210-84-071619-JP-TP-31-4'	4	7/16/2019	<59
S-088210-84-071719-JP-TP-32-2'	2	7/17/2019	610
S-088210-84-071719-JP-TP-32-4'	4	7/17/2019	<60
S-088210-84-072419-JP-SW-1-3'	3	7/24/2019	1100
S-088210-84-080219-JP-SW-1B-3	3	8/2/2019	390
S-088210-84-072419-JP-SW-2-3'	3	7/24/2019	<60
S-088210-84-072419-JP-SW-3-3'	3	7/24/2019	<60
S-088210-84-072419-JP-SW-4-3'	3	7/24/2019	<60
S-088210-84-072419-JP-SW-5-3'	3	7/24/2019	3500
S-088210-84-080219-JP-SW-5b-3	3	8/2/2019	<60
S-088210-84-073019-JP-SW-6-3'	3	7/30/2019	<60
S-088210-84-072919-JP-SW-7-3'	3	7/29/2019	<60
S-088210-84-082619-JP-SW-9-3'	3	8/26/2019	240
S-088210-84-082619-JP-SW-10-3'	3	8/26/2019	<60
S-088210-84-073019-JP-SW-11-2'	2	7/30/2019	<59
S-088210-84-073019-JP-SW-12-2'	2	7/30/2019	<61
S-088210-84-073019-JP-SW-13-2'	2	7/30/2019	<60
S-088210-84-073019-JP-SW-14-2'	2	7/30/2019	<60

GHD-088210-84

**Table 1**  
**Summary of Soil Analytical Data**  
**Galaxy to Hearn Lay Flat**

Page 3 of 3

Sample ID	Depth (feet)	Date	Chloride
S-088210-84-073119-JP-SW-15-2	2	7/31/2019	1100
S-088210-84-073119-JP-SW-15-4	4	7/31/2019	770
S-088210-84-080919-JP-SW-15b-3	3	8/9/2019	<60
S-088210-84-080619-JP-SW-19-3'	3	8/6/2019	370
S-088210-84-080619-JP-SW-20-3'	3	8/6/2019	370
S-088210-84-080619-JP-SW-21-3'	3	8/6/2019	<60
S-088210-84-080619-JP-SW-22-3'	3	8/6/2019	<60
S-088210-84-080619-JP-SW-23-3'	3	8/6/2019	<60
S-088210-84-080619-JP-SW-24-3'	3	8/6/2019	540
S-088210-84-080619-JP-SW-25-3'	3	8/6/2019	<61
S-088210-84-080919-JP-SW-26-3'	3	8/9/2019	110
S-088210-84-080919-JP-SW-27-3'	3	8/9/2019	<60
S-088210-84-080919-JP-SW-28-3'	3	8/9/2019	460
S-088210-84-081219-JP-SW-28b-3'	3	8/12/2019	480
S-088210-84-080919-JP-SW-29-3'	3	8/9/2019	<60
S-088210-84-081219-JP-SW-29b-3'	3	8/12/2019	<60
S-088210-84-080919-JP-SW-156-3'	3	8/9/2019	<60
S-088210-84-081319-JP-SW-30-3'	3	8/13/2019	100
S-088210-84-081319-JP-SW-31-3'	3	8/13/2019	92
S-088210-84-081419-JP-SW-32-3'	3	8/13/2019	330
S-088210-84-081419-JP-SW-34-4'	4	8/13/2019	100
S-088210-84-071719-JP-SS-R-2'	2	7/17/2019	<60
<b>NMOCD Table 1 Closure Limits</b>			<b>600</b>

**Notes:**

All sample results are in milligrams per kilogram

NMOCD = New Mexico Oil Conservation Division

Table 1 Closure Limits = In accordance with 19.15.29 Release Rule

NA = Not Analyzed

BTEX = Benzene, Toluene, Ethylbenzene, Xylenes

TPH = Total Petroleum Hydrocarbons

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

MRO = Motor Oil Range Organics

Yellow Shaded cells = concentrations above Closure Criteria established for site



## Appendices

## Appendix **A**

# **NMOCD C-141 Form**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

Form C-141  
Revised August 24, 2018  
Submit to appropriate OCD District office

Incident ID	NOY1828940305
District RP	
Facility ID	1RF-25
Application ID	pOY1828939480

## Release Notification

### Responsible Party

Responsible Party: EOG Resources, Inc.	OGRID: 7377
Contact Name: Jamon Hohensee	Contact Telephone: 432-556-8074
Contact email: jamon_hohensee@eogresources.com	Incident # (assigned by OCD) NOY1828940305
Contact mailing address: 5509 Champions Dr., Midland Texas 79706	

### Location of Release Source

Latitude 32.19420 Longitude -103.56710  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Galaxy to Hearn's layflat line	Site Type: Layflat line
Date Release Discovered: 9/29/2018	API# (if applicable)

Unit Letter	Section	Township	Range	County
D	27	24S	33E	

State minerals

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 258 bbls	Volume Recovered (bbls) 75bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

#### Cause of Release:

On 9/29/2018 a layflat reuse water transfer line developed a pinhole leak that released 258 bbls of reuse water along Diamond Rd 1 mile south of Hwy 128. The release traveled along Diamond road and down a pipeline ROW for approx. 1000ft. Vac trucks were called and collected 75bbls that were then transferred to EOG water tanks that were in close proximity to the spill. It was calculated that the spill dimensions were approx. 1000' (length) x 5' (wide) x 1' (avg depth). Recent rains and a soil porosity of .29 for a fine sandy loam, a calculated 258bbls of reuse water was released.

Form C-141

State of New Mexico  
Oil Conservation Division

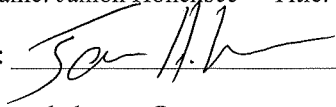
Page 2

Incident ID	NOY1828940305
District RP	
Facility ID	1RF-25
Application ID	pOY1828939480

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Released over 25bbbls of produced water.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? 24hr notice was not given to the OCD due to the initial report of the spill was below the 25bbbls threshold and in a non-sensitive area. A phone call to Oliva Yu was made on 10-1-18 and a voice message was left with Jim Griswold on 10-1-18 as well.	

### Initial Response

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury*

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why: Vac trucks were called to recover as much fluids as possible at release point. Initial response personnel saw small area of pooled fluids and assumed they were contained to that terminus area.
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: Jamon Hohensee Title: Environmental Representative  Signature:  Date: 10-8-18  email: jamon_hohensee@eogresources.com Telephone: 432-556-8074
<div style="display: flex; justify-content: space-between;"> <div> <b>OCD Only</b>             Received by: <span style="border: 1px solid black; padding: 2px;">RECEIVED</span>  <span style="border: 1px solid black; padding: 2px;">By Olivia Yu at 11:01 am, Oct 16, 2018</span> </div> <div>Date: _____</div> </div>

Form C-141

State of New Mexico

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Oil Conservation Division

Incident ID	NOY1828940305
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	UNK (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

### Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☐ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☐ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141

State of New Mexico

Page 4

Oil Conservation Division

Incident ID	NOY1828940305
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: James Kennedy Title: Environmental Supervisor

Signature: James F Kennedy Date: 01/15/2020

email: james\_kennedy@eogresources.com Telephone: 432-848-9146

**OCD Only**

Received by: Jocelyn Harimon Date: 06/08/2023

Form C-141

State of New Mexico

Page 6

Oil Conservation Division

Incident ID	NOY1828940305
District RP	
Facility ID	
Application ID	

## Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

**Closure Report Attachment Checklist:** *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: James Kennedy Title: Environmental Supervisor  
Signature: James F Kennedy Date: 01/15/2020  
email: james\_kennedy@eogresources.com Telephone: 432-848-9146

**OCD Only**

Received by: Jocelyn Harimon Date: 06/08/2023

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Ashley Maxwell Date: 6/23/2023  
Printed Name: Ashley Maxwell Title: Environmental Specialist

## Appendix **B**

# **USGS Water Well Information**





USGS Home

Contact USGS

Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

▼

Geographic Area:

United States

▼

GO

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- [Full News](#) 

Groundwater levels for the Nation

Search Results -- 1 sites found

site\_no list =

- 321017103343201

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 321017103343201 24S.33E.33.23231

Available data for this site

Groundwater: Field measurements

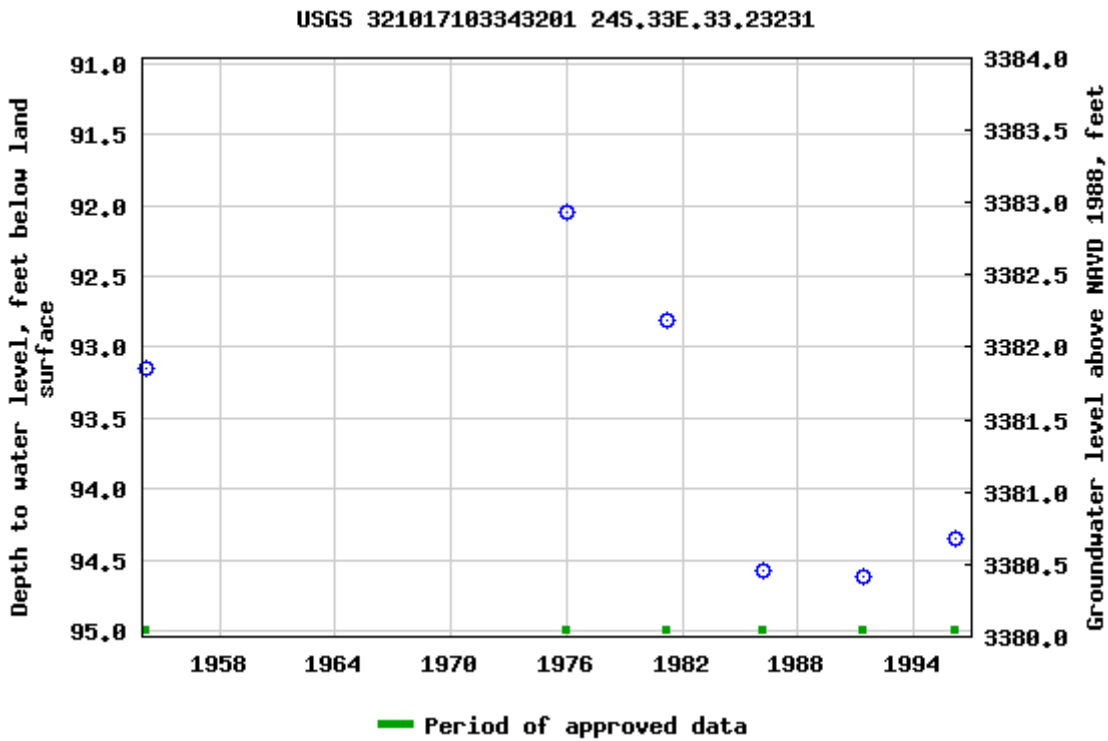
▼

GO

Lea County, New Mexico  
Hydrologic Unit Code 13070007  
Latitude 32°10'17", Longitude 103°34'32" NAD27  
Land-surface elevation 3,475 feet above NAVD88  
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>



Breaks in the plot represent a gap of at least one year between field measurements.  
[Download a presentation-quality graph](#)

- [Questions about sites/data?](#)
- [Feedback on this web site](#)
- [Automated retrievals](#)
- [Help](#)
- [Data Tips](#)
- [Explanation of terms](#)
- [Subscribe for system changes](#)
- [News](#)



Page Contact Information: [USGS Water Data Support Team](#)  
Page Last Modified: 2019-04-24 18:55:25 EDT  
1.03 0.97 nadww01



USGS Home

Contact USGS

Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

▼

Geographic Area:

United States

▼

GO

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- [Full News](#) 

Groundwater levels for the Nation

Search Results -- 1 sites found

site\_no list =

- 321236103350101

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

USGS 321236103350101 24S.33E.17.444414

Available data for this site

Groundwater: Field measurements

▼

GO

Lea County, New Mexico

Hydrologic Unit Code --

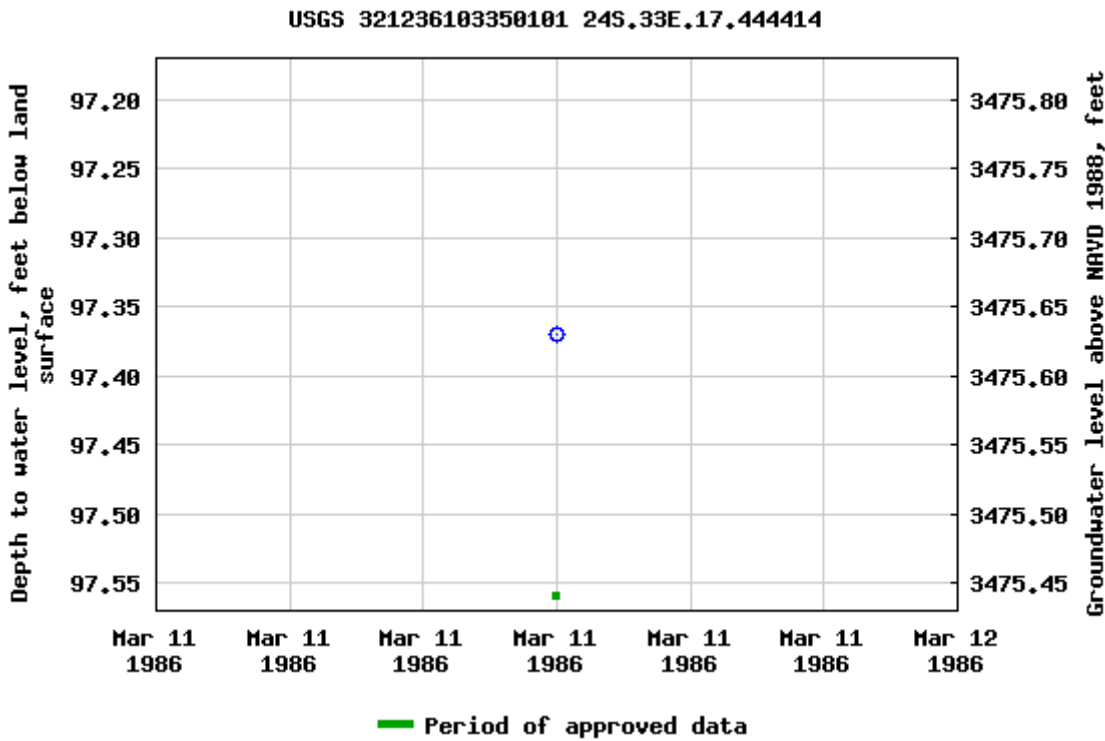
Latitude 32°12'36", Longitude 103°35'01" NAD27

Land-surface elevation 3,573 feet above NAVD88

This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>



Breaks in the plot represent a gap of at least one year between field measurements.

[Download a presentation-quality graph](#)

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- [Automated retrievals](#)
- [Help](#)
- [Data Tips](#)
- [Explanation of terms](#)
- [Subscribe for system changes](#)
- [News](#)



Page Contact Information: [USGS Water Data Support Team](#)  
Page Last Modified: 2019-04-24 19:02:05 EDT  
0.93 0.88 nadww01



# Galaxy to Hearn Layflat



USGS Well 97' DTW

Owl Landfill

Galaxy to Hearn Layflat Line

USGS Well 94' DTW

Google Earth

Released to Imaging: 6/23/2023 8:59:01 AM

© 2018 Google



1 mi



## Appendix **C**

# **USGS Radius Map**



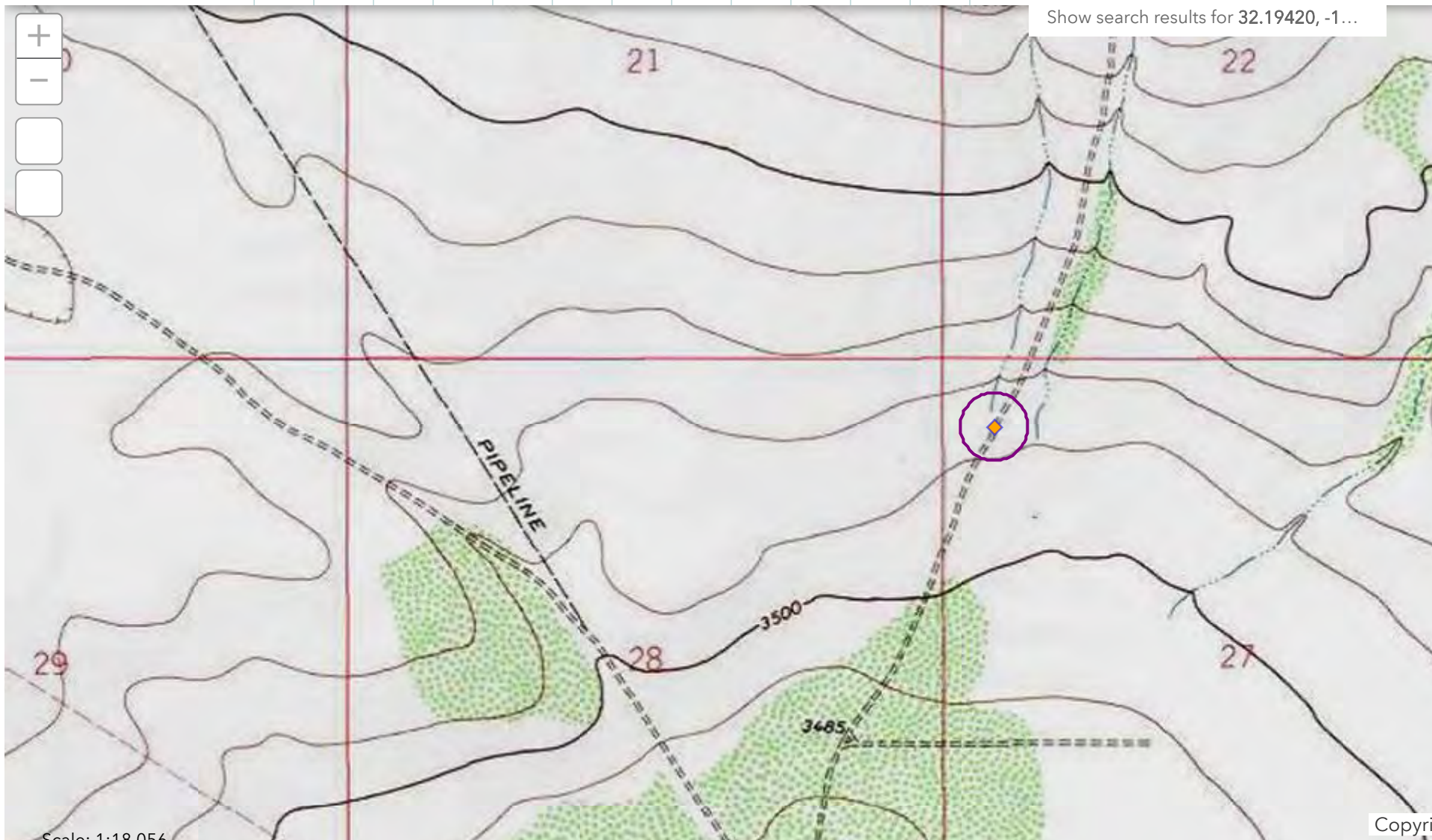
Help Data Download



32.19420, -103.56710



Show search results for 32.19420, -1...



Scale: 1:18,056  
Zoom Level: 15

0.3mi

-103.559 32.196 Degrees

Copyri...

## Appendix D

# Analytical Laboratory Reports





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 08, 2019

Jeff Walker

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: Galaxy to Hearn

OrderNo.: 1905147

Dear Jeff Walker:

Hall Environmental Analysis Laboratory received 12 sample(s) on 5/2/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order: 1905147

Date Reported: 5/8/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905147

Project: Galaxy to Hearn

Lab ID: 1905147-001

Collection Date: 4/29/2019 12:20:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-1-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	15	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	310	70		mg/Kg-dr	20	5/3/2019 7:14:21 PM	44716

Lab ID: 1905147-002

Collection Date: 4/29/2019 12:30:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-2-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	6.8	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	360	64		mg/Kg-dr	20	5/3/2019 7:26:46 PM	44716

Lab ID: 1905147-003

Collection Date: 4/29/2019 12:40:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-3-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	4.6	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	63		mg/Kg-dr	20	5/3/2019 7:39:11 PM	44716

Lab ID: 1905147-004

Collection Date: 4/29/2019 12:50:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-4-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	14	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	140	70		mg/Kg-dr	20	5/3/2019 7:51:36 PM	44716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order: 1905147

Date Reported: 5/8/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905147

Project: Galaxy to Hearn

Lab ID: 1905147-005

Collection Date: 4/29/2019 12:56:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-5-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	20	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	76		mg/Kg-dr	20	5/3/2019 8:04:01 PM	44716

Lab ID: 1905147-006

Collection Date: 4/29/2019 1:15:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-6-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	13	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	69		mg/Kg-dr	20	5/3/2019 8:16:25 PM	44716

Lab ID: 1905147-007

Collection Date: 4/29/2019 1:20:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-7-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	14	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	69		mg/Kg-dr	20	5/3/2019 8:28:50 PM	44716

Lab ID: 1905147-008

Collection Date: 4/29/2019 1:30:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-8-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	18	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	73		mg/Kg-dr	20	5/3/2019 8:41:15 PM	44716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order: 1905147

Date Reported: 5/8/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905147

Project: Galaxy to Hearn

Lab ID: 1905147-009

Collection Date: 4/29/2019 1:45:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-9-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	4.9	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	1800	63		mg/Kg-dr	20	5/3/2019 8:53:40 PM	44716

Lab ID: 1905147-010

Collection Date: 4/29/2019 1:55:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-10-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	14	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	70		mg/Kg-dr	20	5/3/2019 9:06:05 PM	44716

Lab ID: 1905147-011

Collection Date: 4/29/2019 2:10:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-11-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	4.6	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	64		mg/Kg-dr	20	5/3/2019 9:43:19 PM	44716

Lab ID: 1905147-012

Collection Date: 4/29/2019 2:20:00 PM

Client Sample ID: S-088210-84-042919-JP-HA-12-1

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	3.4	1.0		wt%	1	5/6/2019 1:27:00 PM	R59667
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	62		mg/Kg-dr	20	5/3/2019 9:55:43 PM	44716

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 1905147  
08-May-19

Client: GHD  
Project: Galaxy to Hearn

Sample ID: <b>MB-44716</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>		Batch ID: <b>44716</b>		RunNo: <b>59642</b>						
Prep Date: <b>5/3/2019</b>		Analysis Date: <b>5/3/2019</b>		SeqNo: <b>2010555</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-44716</b>		SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>44716</b>		RunNo: <b>59642</b>						
Prep Date: <b>5/3/2019</b>		Analysis Date: <b>5/3/2019</b>		SeqNo: <b>2010556</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.1	90	110			

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: **GHD**Work Order Number: **1905147**RcptNo: **1**Received By: **Jevon Campisi**

5/2/2019 10:30:00 AM

*Jevon Campisi*Completed By: **Isaiah Ortiz**

5/3/2019 9:00:54 AM

*I-Ortiz*Reviewed By: **YLG 5/3/19****LB: DAD 5/3/19**

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? ☐

Checked by: **DAD 5/3/19**

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good	Yes			
2	3.6	Good	Yes			







Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 16, 2019

Jeff Walker

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: Galaxy to Hearus

OrderNo.: 1905386

Dear Jeff Walker:

Hall Environmental Analysis Laboratory received 20 sample(s) on 5/8/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



## Analytical Report

Lab Order: 1905386

Date Reported: 5/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905386

Project: Galaxy to Hearus

Lab ID: 1905386-001

Collection Date: 4/30/2019 1:50:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-12-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	8.7	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	150	65		mg/Kg-dr	20	5/10/2019 12:01:09 AM	44837

Lab ID: 1905386-002

Collection Date: 4/30/2019 2:00:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-12-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	9.5	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	160	66		mg/Kg-dr	20	5/10/2019 12:13:33 AM	44837

Lab ID: 1905386-003

Collection Date: 4/30/2019 2:10:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-13-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	9.1	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	380	66		mg/Kg-dr	20	5/10/2019 6:22:55 PM	44847

Lab ID: 1905386-004

Collection Date: 4/30/2019 2:25:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-13-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	8.9	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1600	66		mg/Kg-dr	20	5/10/2019 7:00:10 PM	44847

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order: 1905386

Date Reported: 5/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905386

Project: Galaxy to Hearus

Lab ID: 1905386-005

Collection Date: 4/30/2019 1:35:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-14-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	14	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1100	70		mg/Kg-dr	20	5/10/2019 7:12:34 PM	44847

Lab ID: 1905386-006

Collection Date: 4/30/2019 1:42:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-14-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	12	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1700	68		mg/Kg-dr	20	5/10/2019 7:24:58 PM	44847

Lab ID: 1905386-007

Collection Date: 4/30/2019 1:18:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-15-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	11	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1900	67		mg/Kg-dr	20	5/10/2019 7:37:23 PM	44847

Lab ID: 1905386-008

Collection Date: 4/30/2019 1:25:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-15-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	9.6	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	2700	170		mg/Kg-dr	50	5/13/2019 5:52:41 PM	44847

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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## Analytical Report

Lab Order: 1905386

Date Reported: 5/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905386

Project: Galaxy to Hearus

Lab ID: 1905386-009

Collection Date: 4/30/2019 12:45:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-16-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	7.9	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1300	65		mg/Kg-dr	20	5/10/2019 8:27:01 PM	44847

Lab ID: 1905386-010

Collection Date: 4/30/2019 12:50:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-16-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	8.3	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	260	65		mg/Kg-dr	20	5/10/2019 8:39:26 PM	44847

Lab ID: 1905386-011

Collection Date: 4/30/2019 12:30:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-17-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	13	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	1900	69		mg/Kg-dr	20	5/10/2019 8:51:51 PM	44847

Lab ID: 1905386-012

Collection Date: 4/30/2019 12:36:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-17-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	10	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	220	66		mg/Kg-dr	20	5/10/2019 9:04:16 PM	44847

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order: 1905386

Date Reported: 5/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905386

Project: Galaxy to Hearus

Lab ID: 1905386-013

Collection Date: 4/30/2019 11:20:00 AM

Client Sample ID: S-088210-84-043019-JP-TP-18-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE							Analyst: JMR
Percent Moisture	8.9	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
EPA METHOD 300.0: ANIONS							Analyst: smb
Chloride	2500	160		mg/Kg-dr	50	5/13/2019 6:05:06 PM	44847

Lab ID: 1905386-014

Collection Date: 4/30/2019 11:25:00 AM

Client Sample ID: S-088210-84-043019-JP-TP-18-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE							Analyst: JMR
Percent Moisture	10	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	1900	67		mg/Kg-dr	20	5/10/2019 9:29:06 PM	44847

Lab ID: 1905386-015

Collection Date: 4/30/2019 11:05:00 AM

Client Sample ID: S-088210-84-043019-JP-TP-19-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE							Analyst: JMR
Percent Moisture	10	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	130	67		mg/Kg-dr	20	5/10/2019 9:41:30 PM	44847

Lab ID: 1905386-016

Collection Date: 4/30/2019 11:15:00 AM

Client Sample ID: S-088210-84-043019-JP-TP-19-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
PERCENT MOISTURE							Analyst: JMR
Percent Moisture	8.9	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
EPA METHOD 300.0: ANIONS							Analyst: MRA
Chloride	330	66		mg/Kg-dr	20	5/10/2019 9:53:55 PM	44847

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	* Value exceeds Maximum Contaminant Level.	B Analyte detected in the associated Method Blank
	D Sample Diluted Due to Matrix	E Value above quantitation range
	H Holding times for preparation or analysis exceeded	J Analyte detected below quantitation limits
	ND Not Detected at the Reporting Limit	P Sample pH Not In Range
	PQL Practical Quantitative Limit	RL Reporting Limit
	S % Recovery outside of range due to dilution or matrix	

## Analytical Report

Lab Order: 1905386

Date Reported: 5/16/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905386

Project: Galaxy to Hearus

Lab ID: 1905386-017

Collection Date: 4/30/2019 10:40:00 AM

Client Sample ID: S-088210-84-043019-JP-TP-20-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	7.5	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	680	65		mg/Kg-dr	20	5/10/2019 10:06:20 PM	44847

Lab ID: 1905386-018

Collection Date: 4/30/2019 10:48:00 AM

Client Sample ID: S-088210-84-043019-JP-TP-20-4

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	8.1	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	ND	65		mg/Kg-dr	20	5/10/2019 10:18:44 PM	44847

Lab ID: 1905386-019

Collection Date: 4/30/2019 1:00:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-21-2

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	9.9	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	ND	66		mg/Kg-dr	20	5/10/2019 10:55:58 PM	44847

Lab ID: 1905386-020

Collection Date: 4/30/2019 1:10:00 PM

Client Sample ID: S-088210-84-043019-JP-TP-21-3

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	7.4	1.0		wt%	1	5/9/2019 4:50:00 PM	R59779
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: MRA
Chloride	240	65		mg/Kg-dr	20	5/10/2019 11:08:23 PM	44847

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1905386

16-May-19

**Client:** GHD  
**Project:** Galaxy to Hearus

Sample ID: <b>MB-44837</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44837</b>	RunNo: <b>59766</b>								
Prep Date: <b>5/9/2019</b>	Analysis Date: <b>5/9/2019</b>	SeqNo: <b>2016270</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-44837</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44837</b>	RunNo: <b>59766</b>								
Prep Date: <b>5/9/2019</b>	Analysis Date: <b>5/9/2019</b>	SeqNo: <b>2016271</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	95.9	90	110			

Sample ID: <b>MB-44847</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>44847</b>	RunNo: <b>59804</b>								
Prep Date: <b>5/10/2019</b>	Analysis Date: <b>5/10/2019</b>	SeqNo: <b>2017920</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-44847</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>44847</b>	RunNo: <b>59804</b>								
Prep Date: <b>5/10/2019</b>	Analysis Date: <b>5/10/2019</b>	SeqNo: <b>2017921</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.3	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

Page 6 of 6





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: **GHD**Work Order Number: **1905386**RcptNo: **1**Received By: **Isaiah Ortiz**

5/8/2019 8:50:00 AM

I-OK

Completed By: **Isaiah Ortiz**

5/8/2019 10:41:14 AM

I-OK

Reviewed By: **LB**

5/8/19

CB: DAD 5/8/19

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: **DAD 5/8/19**

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
By Whom: \_\_\_\_\_ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person  
Regarding: \_\_\_\_\_  
Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good	Yes			
2	2.1	Good	Yes			

# Chain-of-Custody Record

Client: GHD

Mailing Address: 6121 Indian School Rd NE Suite 200 Albuquerque NM 87110

Phone #: (505) 884 0672

email or Fax#: Jeff.walker@ghd.com

QA/QC Package:  
☐ Standard ☐ Level 4 (Full Validation)

Accreditation  
☐ NELAP ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time: 5 day  
☐ Standard ☐ Rush

Project Name: Galaxy to Heron

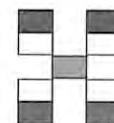
Project #: 088210-84

Project Manager: Jeffrey Walker

Sampler: Joshua Pigg

On Ice: ☒ Yes ☐ No

Sample Temperature: 2.3°C 2.1°C



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

### Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F, Cl, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	EPA 300 Chlorides	% moisture	Air Bubbles (Y or N)
5-30-19	1350	S	S-088210-84-043019-JP-TP-12-2	4cc glass Jar	ICE	-001												X	X	
	1400		S-088210-84-043019-JP-TP-12-3			-002												X	X	
	1410		S-088210-84-043019-JP-TP-13-2			-003												X	X	
	1425		S-088210-84-043019-JP-TP-13-3			-004												X	X	
	1335		S-088210-84-043019-JP-TP-14-2			-005												X	✓	
	1342		S-088210-84-043019-JP-TP-14-3			-006												X	✓	
	1318		S-088210-84-043019-JP-TP-15-2			-007												X	✓	
	1325		S-088210-84-043019-JP-TP-15-3			-008												X	X	
	1245		S-088210-84-043019-JP-TP-16-2			-009												✓	X	
	1250		S-088210-84-043019-JP-TP-16-3			-010												X	X	
	1230		S-088210-84-043019-JP-TP-17-2			-011												X	X	
✓	1236	✓	S-088210-84-043019-JP-TP-17-3	✓	✓	-012												X	X	

Date: 5-5-19 Time: \_\_\_\_\_ Relinquished by: [Signature]

Date: 5/7/19 Time: 0900 Received by: [Signature]

Date: 5/8/19 Time: 0950 Relinquished by: [Signature]

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: T-C courier

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.







Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

May 14, 2019

Michael Gant

GHD

6121 Indian School Road, NE #200

Albuquerque, NM 87110

TEL: (505) 884-0672

FAX

RE: Galaxy to Hearn Lay Flat

OrderNo.: 1905544

Dear Michael Gant:

Hall Environmental Analysis Laboratory received 11 sample(s) on 5/10/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report

Lab Order: 1905544

Date Reported: 5/14/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905544

Project: Galaxy to Hearn Lay Flat

Lab ID: 1905544-001

Collection Date: 5/1/2019 11:15:00 AM

Client Sample ID: S-088210-84-050119-PL-TP-6-2'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	11	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	67		mg/Kg-dr	20	5/13/2019 11:40:21 AM	44858

Lab ID: 1905544-002

Collection Date: 5/1/2019 11:18:00 AM

Client Sample ID: S-088210-84-050119-PL-TP-6-3'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	8.7	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	390	65		mg/Kg-dr	20	5/13/2019 12:17:34 PM	44858

Lab ID: 1905544-003

Collection Date: 5/1/2019 11:26:00 AM

Client Sample ID: S-088210-84-050119-PL-TP-9-2'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	11	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	67		mg/Kg-dr	20	5/13/2019 12:29:59 PM	44858

Lab ID: 1905544-004

Collection Date: 5/1/2019 11:30:00 AM

Client Sample ID: S-088210-84-050119-PL-TP-9-4'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	11	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	68		mg/Kg-dr	20	5/13/2019 12:42:24 PM	44858

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		



## Analytical Report

Lab Order: 1905544

Date Reported: 5/14/2019

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: GHD

Lab Order: 1905544

Project: Galaxy to Hearn Lay Flat

Lab ID: 1905544-005

Collection Date: 5/1/2019 11:35:00 AM

Client Sample ID: S-088210-84-050119-PL-TP-11-2'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	12	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	330	68		mg/Kg-dr	20	5/13/2019 12:54:49 PM	44858

Lab ID: 1905544-006

Collection Date: 5/1/2019 12:30:00 PM

Client Sample ID: S-088210-84-050119-PL-TP-10-2'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	6.7	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	64		mg/Kg-dr	20	5/13/2019 1:07:14 PM	44858

Lab ID: 1905544-007

Collection Date: 5/1/2019 12:35:00 PM

Client Sample ID: S-088210-84-050119-PL-TP-10-3'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	14	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	70		mg/Kg-dr	20	5/13/2019 2:09:16 PM	44858

Lab ID: 1905544-008

Collection Date: 5/1/2019 12:39:00 PM

Client Sample ID: S-088210-84-050119-PL-TP-8-1'

Matrix: SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b>							Analyst: JMR
Percent Moisture	3.6	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b>							Analyst: smb
Chloride	ND	63		mg/Kg-dr	20	5/13/2019 2:21:41 PM	44858

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order: 1905544

Date Reported: 5/14/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD **Lab Order:** 1905544  
**Project:** Galaxy to Hearn Lay Flat

**Lab ID:** 1905544-009 **Collection Date:** 5/1/2019 12:43:00 PM

**Client Sample ID:** S-088210-84-050119-PL-TP-7-2' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b> Analyst: JMR							
Percent Moisture	7.9	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b> Analyst: smb							
Chloride	810	65		mg/Kg-dr	20	5/13/2019 2:34:05 PM	44858

**Lab ID:** 1905544-010 **Collection Date:** 5/1/2019 1:00:00 PM

**Client Sample ID:** S-088210-84-050119-PL-TP-22-2' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b> Analyst: JMR							
Percent Moisture	9.0	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b> Analyst: smb							
Chloride	ND	66		mg/Kg-dr	20	5/13/2019 2:46:30 PM	44858

**Lab ID:** 1905544-011 **Collection Date:** 5/1/2019 1:05:00 PM

**Client Sample ID:** S-088210-84-050119-PL-TP-22-3' **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>PERCENT MOISTURE</b> Analyst: JMR							
Percent Moisture	6.6	1.0		wt%	1	5/10/2019 4:32:00 PM	R59848
<b>EPA METHOD 300.0: ANIONS</b> Analyst: smb							
Chloride	ND	64		mg/Kg-dr	20	5/13/2019 2:58:55 PM	44858

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 1905544  
14-May-19

Client: GHD  
Project: Galaxy to Hearn Lay Flat

Sample ID: MB-44858	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 44858	RunNo: 59849
Prep Date: 5/10/2019	Analysis Date: 5/13/2019	SeqNo: 2018822 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-44858	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 44858	RunNo: 59849
Prep Date: 5/10/2019	Analysis Date: 5/13/2019	SeqNo: 2018823 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 92.3 90 110

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

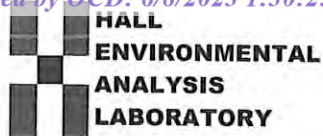
Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: GHD

Work Order Number: 1905544

RcptNo: 1

Received By: Erin Melendrez 5/10/2019 8:50:00 AM

Completed By: Leah Baca 5/10/2019 11:40:27 AM

Reviewed By: ENM 5/10/19

Labeled by LP 5/10/19

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered? Courier

## Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

(&lt;2 or &gt;12 unless noted)

Adjusted?

Checked by: LP 5/10/19

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Yes			

## Chain-of-Custody Record

Client: GHD Services, Inc.

Mailing Address: 241 W. Main St., Ste. 108  
Artesia, NM 88210

Phone #: 832-374-4885

email or Fax#: Michael.Gant@GHD.com

QA/QC Package:  
☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance  
☐ NELAC ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time:

☐ Standard☒ Rush 3-day

Project Name:

Galaxy to Hearn's Lay Flat

Project #:

088210-84

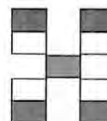
Project Manager:

Mike GantSampler: Phil LoringOn Ice: ☒ Yes ☐ No# of Coolers: 1 (CF = -0.1)Cooler Temp (including CF): 3.8°C

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	CHL, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	% moisture
5-1-19	11:15	Soil	5-088210-84-050119- PL-TP-6-2'	402.glass-1	Ice	-001							X			X	
	11:18		5-088210-84-050119- PL-TP-6-3'			-002							X			X	
	11:26		5-088210-84-050119- PL-TP-9-2'			-003							X			X	
	11:30		5-088210-84-050119- PL-TP-9-4'			-004							X			X	
	11:35		5-088210-84-050119- PL-TP-11-2'			-005							X			X	
	12:30		5-088210-84-050119- PL-TP-10-2'			-006							X			X	
	12:35		5-088210-84-050119- PL-TP-10-3'			-007							X			X	
	12:39		5-088210-84-050119- PL-TP-8-1'			-008							X			X	
	12:43		5-088210-84-050119- PL-TP-7-2'			-009							X			X	
	13:00		5-088210-84-050119- PL-TP-23-2'			-010							X			X	
	13:05		5-088210-84-050119- PL-TP-22-3'			-011							X			X	

Date: 5-7-19	Time: 18:30	Relinquished by: <u>Phil Loring</u>	Received by: <u>[Signature]</u>	Via: _____	Date: 5/8/19	Time: 0000
Date: 5/8/19	Time: 1940	Relinquished by: <u>[Signature]</u>	Received by: <u>[Signature]</u>	Via: Courier	Date: 5/10/19	Time: 0850

Remarks:

HALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	CHL, Br, NO <sub>3</sub> , NO <sub>2</sub> , PO <sub>4</sub> , SO <sub>4</sub>	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	% moisture
						X			X	
						X			X	
						X			X	
						X			X	
						X			X	
						X			X	
						X			X	
						X			X	
						X			X	
						X			X	
						X			X	
						X			X	
						X			X	



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 01, 2019

James Orneles  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1907D79

Dear James Orneles:

Hall Environmental Analysis Laboratory received 5 sample(s) on 7/26/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order: 1907D79

Date Reported: 8/1/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1907D79

**Lab ID:** 1907D79-001 **Collection Date:** 7/24/2019 2:20:00 PM  
**Client Sample ID:** S-0882010-84-072419JP SW-1-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	1100	60		mg/Kg	20	7/26/2019 5:43:12 PM	46427
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**Lab ID:** 1907D79-002 **Collection Date:** 7/24/2019 2:25:00 PM  
**Client Sample ID:** S-0882010-84-072419JP SW-2-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	7/26/2019 5:55:37 PM	46427
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**Lab ID:** 1907D79-003 **Collection Date:** 7/24/2019 2:30:00 PM  
**Client Sample ID:** S-0882010-84-072419JP SW-3-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	7/26/2019 6:32:51 PM	46427
----------	----	----	--	-------	----	----------------------	-------

**Lab ID:** 1907D79-004 **Collection Date:** 7/24/2019 2:35:00 PM  
**Client Sample ID:** S-0882010-84-072419JP SW-4-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	7/26/2019 6:45:15 PM	46427
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**Lab ID:** 1907D79-005 **Collection Date:** 7/24/2019 2:40:00 PM  
**Client Sample ID:** S-0882010-84-072419JP SW-5-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	3500	150		mg/Kg	50	7/30/2019 12:52:34 AM	46427
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 2



QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 1907D79  
01-Aug-19

Client: GHD Midland  
Project: Galaxy to Hearn

Sample ID: MB-46427	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 46427	RunNo: 61674
Prep Date: 7/26/2019	Analysis Date: 7/26/2019	SeqNo: 2091646 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-46427	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 46427	RunNo: 61674
Prep Date: 7/26/2019	Analysis Date: 7/26/2019	SeqNo: 2091647 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.2 90 110

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: GHD MIDLAND

Work Order Number: 1907D79

RcptNo: 1

Received By: Desiree Dominguez

7/26/2019 8:40:00 AM

Completed By: Leah Baca

7/26/2019 11:27:05 AM

Reviewed By: LB

7/26/19

CRYS LB 7/29/19  
ID2  
Leah Baca

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

## Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:  
( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: DAD 7/26/19

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes			





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

July 19, 2019

James Orneles  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX

RE: Galaxy to Hearn

OrderNo.: 1907817

Dear James Orneles:

Hall Environmental Analysis Laboratory received 18 sample(s) on 7/17/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order: 1907817

Date Reported: 7/19/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1907817**Lab ID:** 1907817-001 **Collection Date:** 7/16/2019 9:15:00 AM**Client Sample ID:** S-088210-84-071619-JP-TP-23-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: MRA

Chloride	700	60		mg/Kg	20	7/18/2019 11:22:28 AM	46246
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**Lab ID:** 1907817-002 **Collection Date:** 7/16/2019 9:19:00 AM**Client Sample ID:** S-088210-84-071619-JP-TP-23-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: MRA

Chloride	590	60		mg/Kg	20	7/18/2019 11:34:53 AM	46246
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**Lab ID:** 1907817-003 **Collection Date:** 7/16/2019 9:28:00 AM**Client Sample ID:** S-088210-84-071619-JP-TP-24-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: MRA

Chloride	220	60		mg/Kg	20	7/18/2019 11:47:18 AM	46246
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**Lab ID:** 1907817-004 **Collection Date:** 7/16/2019 9:35:00 AM**Client Sample ID:** S-088210-84-071619-JP-TP-24-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: MRA

Chloride	ND	60		mg/Kg	20	7/18/2019 11:59:42 AM	46246
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**Lab ID:** 1907817-005 **Collection Date:** 7/16/2019 9:40:00 AM**Client Sample ID:** S-088210-84-071619-JP-TP-25-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: MRA

Chloride	360	60		mg/Kg	20	7/18/2019 12:12:06 PM	46246
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order: 1907817

Date Reported: 7/19/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1907817

**Lab ID:** 1907817-006 **Collection Date:** 7/16/2019 9:49:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-25-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	290	61		mg/Kg	20	7/18/2019 12:24:31 PM	46246

**Lab ID:** 1907817-007 **Collection Date:** 7/16/2019 9:58:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-26-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	ND	60		mg/Kg	20	7/18/2019 12:36:55 PM	46246

**Lab ID:** 1907817-008 **Collection Date:** 7/16/2019 10:05:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-26-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	98	60		mg/Kg	20	7/18/2019 12:49:19 PM	46246

**Lab ID:** 1907817-009 **Collection Date:** 7/16/2019 10:15:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-27-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	580	60		mg/Kg	20	7/18/2019 1:26:33 PM	46246

**Lab ID:** 1907817-010 **Collection Date:** 7/16/2019 10:21:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-27-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	140	60		mg/Kg	20	7/18/2019 1:38:58 PM	46246

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order: 1907817

Date Reported: 7/19/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1907817

**Lab ID:** 1907817-011 **Collection Date:** 7/16/2019 10:30:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-28-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	ND	60		mg/Kg	20	7/18/2019 1:51:22 PM	46246

**Lab ID:** 1907817-012 **Collection Date:** 7/16/2019 10:35:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-28-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	ND	60		mg/Kg	20	7/18/2019 2:28:36 PM	46246

**Lab ID:** 1907817-013 **Collection Date:** 7/16/2019 10:41:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-29-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	130	60		mg/Kg	20	7/18/2019 2:41:00 PM	46246

**Lab ID:** 1907817-014 **Collection Date:** 7/16/2019 10:51:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-29-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: smb							
Chloride	220	60		mg/Kg	20	7/18/2019 11:23:42 AM	46249

**Lab ID:** 1907817-015 **Collection Date:** 7/16/2019 11:01:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-30-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: smb							
Chloride	690	60		mg/Kg	20	7/18/2019 11:36:06 AM	46249

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

## Analytical Report

Lab Order: 1907817

Date Reported: 7/19/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1907817

**Lab ID:** 1907817-016 **Collection Date:** 7/16/2019 11:07:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-30-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: <b>smb</b>							
Chloride	1700	60		mg/Kg	20	7/18/2019 11:48:31 AM	46249

**Lab ID:** 1907817-017 **Collection Date:** 7/16/2019 11:28:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-31-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: <b>smb</b>							
Chloride	61	59		mg/Kg	20	7/18/2019 12:00:56 PM	46249

**Lab ID:** 1907817-018 **Collection Date:** 7/16/2019 11:40:00 AM  
**Client Sample ID:** S-088210-84-071619-JP-TP-31-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: <b>smb</b>							
Chloride	ND	59		mg/Kg	20	7/18/2019 12:38:10 PM	46249

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 4 of 5



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 1907817

19-Jul-19

**Client:** GHD Midland  
**Project:** Galaxy to Hearn

Sample ID: <b>MB-46246</b>	SampType: <b>mblk</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46246</b>	RunNo: <b>61473</b>								
Prep Date: <b>7/18/2019</b>	Analysis Date: <b>7/18/2019</b>	SeqNo: <b>2084960</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-46246</b>	SampType: <b>lcs</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46246</b>	RunNo: <b>61473</b>								
Prep Date: <b>7/18/2019</b>	Analysis Date: <b>7/18/2019</b>	SeqNo: <b>2084961</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.1	90	110			

Sample ID: <b>MB-46249</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46249</b>	RunNo: <b>61478</b>								
Prep Date: <b>7/18/2019</b>	Analysis Date: <b>7/18/2019</b>	SeqNo: <b>2085062</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-46249</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46249</b>	RunNo: <b>61478</b>								
Prep Date: <b>7/18/2019</b>	Analysis Date: <b>7/18/2019</b>	SeqNo: <b>2085063</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.8	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: **GHD MIDLAND**Work Order Number: **1907817**RcptNo: **1**Received By: **Erin Melendrez**

7/17/2019 8:45:00 AM

*UAG*Completed By: **Erin Melendrez**

7/17/2019 9:16:43 AM

*UAG*Reviewed By: **DAD 7/17/19**

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

## Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted?

Checked by: **ENM 7/17/19**

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

*James Ornelas*Date: *7/18/19*

By Whom:

*Leah Bach*

Via:

☐ eMail☒ Phone☐ Fax☐ In Person

Regarding:

*-005, -004 had time discrepancies between COC and Label*

Client Instructions:

*Use the times on the COC.*

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.9	Good	Not Present			

## Chain-of-Custody Record

Client: GHD

Mailing Address: 2135 S Loop 250 W  
Midland Tx 79703

Phone #: 432 686 0986

email or Fax#: james.orneles@ghd.com

QA/QC Package:  
☐ Standard ☐ Level 4 (Full Validation)

Accreditation  
☐ NELAP ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time:  
☐ Standard ☒ Rush 2 day

Project Name:  
Galaxy to Hears

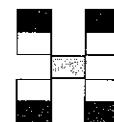
Project #:  
088210-84

Project Manager:  
James Orneles

Sampler: Joshua Pigg

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.9 + 0.0 (C) = 3.9 F

HALL ENVIRONMENTAL  
ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

email or Fax#: <u>james.ornelas@ghd.com</u>				Project Manager:			BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO <sub>3</sub> ,NO <sub>2</sub> ,PO <sub>4</sub> ,SO <sub>4</sub> )	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	chloride 300						Air Bubbles (Y or N)
QA/QC Package:				James Ornelas																				
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)				Sampler: <u>Joshua Pigg</u>																				
<input type="checkbox"/> NELAP <input type="checkbox"/> Other _____				On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																				
<input type="checkbox"/> EDD (Type) _____				Sample Temperature: <u>3.9+0.0(CF)=3.9°</u>																				
Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.																		
7-16-19						1907817																		
7-16-19	915	S	S-088210-84-071619-JP-TP-23-2	Sample Bag	NA	-001													X					
	919		S-088210-84-071619-JP-TP-23-4			-002													X					
	928		S-088210-84-071619-JP-TP-24-2			-003													X					
	935		S-088210-84-071619-JP-TP-24-4			-004													X					
	940		S-088210-84-071619-JP-25-2			-005													X					
	949		S-088210-84-071619-JP-25-4			-006													X					
	958		S-088210-84-071619-JP-26-2			-007													X					
	1005		S-088210-84-071619-JP-TP-26-4			-008													X					
	1025		S-088210-84-071619-JP-TP-27-2			-009													X					
	1021		S-088210-84-071619-JP-TP-27-4			-010													X					
	1030		S-088210-84-071619-JP-TP-28-2			-011													X					
↓	1035	↓	S-088210-84-071619-JP-TP-28-4	↓	↓	-012													X					

Date: 7-16-19 Time: 1430 Relinquished by: [Signature]

Date: 7/16/19 Time: 1900 Relinquished by: [Signature]

Received by: [Signature] Date: 7/16/19 Time: 1930

Received by: [Signature] Date: 7/17/19 Time: 0845

Remarks:

Released to Imaging: 6/23/2023 8:59:01 AM

G4D

2135 S Loop 250 W

Midland Tx 79703

Phone #: 432 686 0086

email or Fax#: James.Ornelas@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

## Accreditation

☐ NELAP      ☐ Other: \_\_\_\_\_☐ EDD (Type)☐ Standard

☒ Rush 48 hr's

Project Name:

Galaxy to Hearn S

Project #:

088210-84

**Project Manager:**

James Ornelas

Sampler: Joshua Pigg


On Ice: ☒ Yes ☐ No

Sample Temperature:  $3.9 \pm 0.1$  (CF) =  $3.9^\circ\text{C}$

[illegible]

Date:	Time:	Relinquished by:
-------	-------	------------------

7-1619 | 1430

Relinquished by: 

Received by:                     

Date	Time
------	------

7/11/19 1430

Date:	Time:	<del>Relinquished by:</del>
-------	-------	-----------------------------

Received by:

Courier Date Time  
 7/17/19 0845

Date : Time

0845

Remarks:



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975      Fax 505-345-4107

## Analysis Request

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

July 23, 2019

James Orneles  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1907974

Dear James Orneles:

Hall Environmental Analysis Laboratory received 11 sample(s) on 7/19/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order: 1907974

Date Reported: 7/23/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1907974**Lab ID:** 1907974-001 **Collection Date:** 7/17/2019 11:15:00 AM**Client Sample ID:** S-088210-84-071719-JP-TP-1-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	130	61		mg/Kg	20	7/20/2019 3:02:21 PM	46295
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**Lab ID:** 1907974-002 **Collection Date:** 7/17/2019 11:18:00 AM**Client Sample ID:** S-088210-84-071719-JP-TP-1-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	290	60		mg/Kg	20	7/20/2019 4:04:23 PM	46295
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**Lab ID:** 1907974-003 **Collection Date:** 7/17/2019 10:55:00 AM**Client Sample ID:** S-088210-84-071719-JP-TP-2-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	59		mg/Kg	20	7/20/2019 4:16:47 PM	46295
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**Lab ID:** 1907974-004 **Collection Date:** 7/17/2019 11:03:00 AM**Client Sample ID:** S-088210-84-071719-JP-TP-2-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	91	60		mg/Kg	20	7/20/2019 4:29:12 PM	46295
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**Lab ID:** 1907974-005 **Collection Date:** 7/17/2019 10:35:00 AM**Client Sample ID:** S-088210-84-071719-JP-TP-3-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	7/20/2019 4:41:36 PM	46295
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 4

## Analytical Report

Lab Order: 1907974

Date Reported: 7/23/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1907974

**Lab ID:** 1907974-006 **Collection Date:** 7/17/2019 10:43:00 AM  
**Client Sample ID:** S-088210-84-071719-JP-TP-3-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	240	60		mg/Kg	20	7/20/2019 4:54:01 PM	46295

**Lab ID:** 1907974-007 **Collection Date:** 7/17/2019 10:20:00 AM  
**Client Sample ID:** S-088210-84-071719-JP-TP-4-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	130	60		mg/Kg	20	7/20/2019 5:06:25 PM	46295

**Lab ID:** 1907974-008 **Collection Date:** 7/17/2019 10:28:00 AM  
**Client Sample ID:** S-088210-84-071719-JP-TP-4-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	960	60		mg/Kg	20	7/20/2019 5:18:50 PM	46295

**Lab ID:** 1907974-009 **Collection Date:** 7/17/2019 11:45:00 AM  
**Client Sample ID:** S-088210-84-071719-JP-TP-32-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	610	60		mg/Kg	20	7/22/2019 11:17:21 PM	46313

**Lab ID:** 1907974-010 **Collection Date:** 7/17/2019 11:58:00 AM  
**Client Sample ID:** S-088210-84-071719-JP-TP-32-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: MRA							
Chloride	ND	60		mg/Kg	20	7/22/2019 11:29:45 PM	46313

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 2 of 4

**Analytical Report**Lab Order: **1907974**Date Reported: **7/23/2019****Hall Environmental Analysis Laboratory, Inc.**

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1907974**Lab ID:** 1907974-011**Collection Date:** 7/17/2019 11:21:00 AM**Client Sample ID:** S-088210-84-071719-JP-SS-R-2**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	ND	60		mg/Kg	20	7/22/2019 11:42:10 PM	46313

Analyst: **MRA**

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 3 of 4



**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1907974****23-Jul-19**

**Client:** GHD Midland  
**Project:** Galaxy to Hearn

Sample ID: <b>MB-46295</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46295</b>	RunNo: <b>61542</b>								
Prep Date: <b>7/19/2019</b>	Analysis Date: <b>7/20/2019</b>	SeqNo: <b>2085988</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-46295</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46295</b>	RunNo: <b>61542</b>								
Prep Date: <b>7/19/2019</b>	Analysis Date: <b>7/20/2019</b>	SeqNo: <b>2085989</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	91.6	90	110			

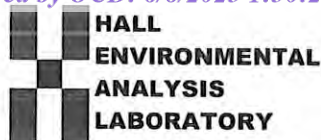
Sample ID: <b>MB-46313</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46313</b>	RunNo: <b>61554</b>								
Prep Date: <b>7/22/2019</b>	Analysis Date: <b>7/22/2019</b>	SeqNo: <b>2087114</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-46313</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46313</b>	RunNo: <b>61554</b>								
Prep Date: <b>7/22/2019</b>	Analysis Date: <b>7/22/2019</b>	SeqNo: <b>2087115</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.7	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: **GHD MIDLAND**Work Order Number: **1907974**

RcptNo: 1

Received By: **Desiree Dominguez**

7/19/2019 9:25:00 AM

Completed By: **Erin Melendrez**

7/19/2019 11:01:41 AM

Reviewed By: **ENM**

7/19/19

*Handwritten initials: ID, UG*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved bottles checked for pH: \_\_\_\_\_  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: **DAD 7/19/19**

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_ Date: \_\_\_\_\_  
By Whom: \_\_\_\_\_ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person  
Regarding: \_\_\_\_\_  
Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.0	Good	Yes			

## Chain-of-Custody Record

Client: GHD

Mailing Address: 2135 S Loop 250 west  
Midland Tx, 79703

Phone #: 432 686 0086

email or Fax#: james.orcutes@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other \_\_\_\_\_

☐ EDD (Type) \_\_\_\_\_

Turn-Around Time:

☐ Standard      ☐ Rush 3 day

Project Name:

Galaxy to Heron's

Project #:
------------

088210-84

Project Manager:

James Oracles

Sampler:


Joshua Piqa

On Ice:

☒ Yes ☐ No

Sample Temperature:  $3.4 - 0.4 = 3.0^\circ$


[illegible]

Date:	Time:	Relinquished by:
7-16-19	1615	

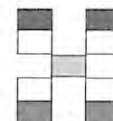
Received by:	Date	Time
	2/12/19	0800

Remarks:
----------

Date:	Time:	Relinquished by:
1/18/19	1900	[Signature]

Received by:	Date	Time
 courier	7/19/19	9:25

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975      Fax 505-345-4107

### Analysis Request

[illegible]





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 06, 2019

James Orneles  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1908021

Dear James Orneles:

Hall Environmental Analysis Laboratory received 8 sample(s) on 8/1/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order: 1908021

Date Reported: 8/6/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908021**Lab ID:** 1908021-001 **Collection Date:** 7/29/2019 10:25:00 AM**Client Sample ID:** S-088210-84-072919-JP-TP-S-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	120	60		mg/Kg	20	8/5/2019 11:46:29 PM	46581

Analyst: CAS

**Lab ID:** 1908021-002 **Collection Date:** 7/29/2019 10:45:00 AM**Client Sample ID:** S-088210-84-072919-JP-TP-S-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	260	60		mg/Kg	20	8/5/2019 11:58:54 PM	46581

Analyst: CAS

**Lab ID:** 1908021-003 **Collection Date:** 7/29/2019 8:55:00 AM**Client Sample ID:** S-088210-84-072919-JP-SW-7-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	ND	60		mg/Kg	20	8/6/2019 12:36:08 AM	46581

Analyst: CAS

**Lab ID:** 1908021-004 **Collection Date:** 7/30/2019 9:25:00 AM**Client Sample ID:** S-088210-84-073019-JP-SW-6-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	ND	60		mg/Kg	20	8/5/2019 3:17:43 PM	46581

Analyst: CAS

**Lab ID:** 1908021-005 **Collection Date:** 7/30/2019 1:15:00 PM**Client Sample ID:** S-088210-84-073019-JP-SW-11-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b>							
Chloride	ND	59		mg/Kg	20	8/5/2019 3:30:08 PM	46581

Analyst: CAS

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 3

## Analytical Report

Lab Order: 1908021

Date Reported: 8/6/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908021

**Lab ID:** 1908021-006 **Collection Date:** 7/30/2019 1:18:00 PM  
**Client Sample ID:** S-088210-84-073019-JP-SW-12-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	ND	61		mg/Kg	20	8/5/2019 4:07:22 PM	46581

**Lab ID:** 1908021-007 **Collection Date:** 7/30/2019 1:25:00 PM  
**Client Sample ID:** S-088210-84-073019-JP-SW-13-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	ND	60		mg/Kg	20	8/5/2019 4:19:47 PM	46581

**Lab ID:** 1908021-008 **Collection Date:** 7/30/2019 3:10:00 PM  
**Client Sample ID:** S-088210-84-073019-JP-SW-14-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	ND	60		mg/Kg	20	8/5/2019 4:32:11 PM	46581

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 2 of 3

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908021

06-Aug-19

Client: GHD Midland  
Project: Galaxy to Hearn

Sample ID: MB-46581	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 46581	RunNo: 61901
Prep Date: 8/5/2019	Analysis Date: 8/5/2019	SeqNo: 2099842 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-46581	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 46581	RunNo: 61901
Prep Date: 8/5/2019	Analysis Date: 8/5/2019	SeqNo: 2099843 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 92.1 90 110

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD MIDLAND

Work Order Number: 1908021

RcptNo: 1

Received By: Leah Baca

8/1/2019 9:05:00 AM

Completed By: Erin Melendrez

8/1/2019 10:58:59 AM

Reviewed By: ENH

8/1/19

*Leah Baca*  
*EM*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐2. How was the sample delivered? Client

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

# of preserved  
bottles checked  
for pH:

(&lt;2 or &gt;12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: DAD 8/1/19

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.6	Good	Not Present			







Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 06, 2019

James Orneles  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1908087

Dear James Orneles:

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/2/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order: 1908087

Date Reported: 8/6/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908087**Lab ID:** 1908087-001 **Collection Date:** 7/31/2019 8:45:00 AM**Client Sample ID:** S-088210-84-073119-JP-BS-1-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	8/2/2019 5:23:27 PM	46569
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**Lab ID:** 1908087-002 **Collection Date:** 7/31/2019 8:55:00 AM**Client Sample ID:** S-088210-84-073119-JP-BS-2-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	8/2/2019 5:35:52 PM	46569
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**Lab ID:** 1908087-003 **Collection Date:** 7/31/2019 10:10:00 AM**Client Sample ID:** S-088210-84-073119-JP-SW-15-2 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	1100	60		mg/Kg	20	8/2/2019 5:48:16 PM	46569
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**Lab ID:** 1908087-004 **Collection Date:** 7/31/2019 10:15:00 AM**Client Sample ID:** S-088210-84-073119-JP-SW-15-4 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
----------	--------	----	------	-------	----	---------------	----------

**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	770	59		mg/Kg	20	8/2/2019 6:00:41 PM	46569
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**Lab ID:** 1908087-005 **Collection Date:** 7/31/2019 2:25:00 PM**Client Sample ID:** S-088210-84-073119-JP-SW-16-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
----------	--------	----	------	-------	----	---------------	----------

**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	8/2/2019 6:13:05 PM	46569
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		



## Analytical Report

Lab Order: 1908087

Date Reported: 8/6/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908087**Lab ID:** 1908087-006**Collection Date:** 7/31/2019 2:28:00 PM**Client Sample ID:** S-088210-84-073119-JP-SW-17-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	8/2/2019 6:25:30 PM	46569
----------	----	----	--	-------	----	---------------------	-------

**Lab ID:** 1908087-007**Collection Date:** 7/31/2019 2:45:00 PM**Client Sample ID:** S-088210-84-073119-JP-SW-18-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
----------	--------	----	------	-------	----	---------------	----------

**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	77	60		mg/Kg	20	8/2/2019 6:37:55 PM	46569
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 2 of 3



QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 1908087  
06-Aug-19

Client: GHD Midland  
Project: Galaxy to Hearn

Sample ID: MB-46569	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 46569	RunNo: 61879
Prep Date: 8/2/2019	Analysis Date: 8/2/2019	SeqNo: 2098318 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-46569	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 46569	RunNo: 61879
Prep Date: 8/2/2019	Analysis Date: 8/2/2019	SeqNo: 2098319 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.7 90 110

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

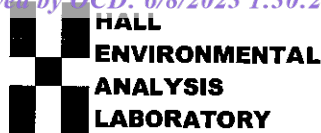
Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: **GHD MIDLAND**Work Order Number: **1908087**

RcptNo: 1

Received By: **CHRIS B.**

8/2/2019 9:00:00 AM

Completed By: **Desiree Dominguez**

8/2/2019 9:48:26 AM

Reviewed By: **DAD 8/2/19**

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

## Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH: \_\_\_\_\_  
( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: **YG 8/2/19**

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good	Not Present			
2	3.4	Good	Not Present			

Released to Imaging: 6/23/2023 8:59:01 AM

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Tel. 505-345-3975      Fax 505-345-4107

## Analysis Request

[illegible]

Received by OCD: 6/8/2023 1:30:25 PM

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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

September 03, 2019

Justin Nixon  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1908G19

Dear Justin Nixon:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/28/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order: 1908G19

Date Reported: 9/3/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908G19**Lab ID:** 1908G19-001**Collection Date:** 8/26/2019 3:10:00 PM**Client Sample ID:** S-088210-84-082619-JP-SW-9-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	240	60		mg/Kg	20	8/29/2019 11:20:45 AM	47134
----------	-----	----	--	-------	----	-----------------------	-------

**Lab ID:** 1908G19-002**Collection Date:** 8/26/2019 3:00:00 PM**Client Sample ID:** S-088210-84-082619-JP-SW-10-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	8/29/2019 11:57:59 AM	47134
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 2

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908G19

03-Sep-19

Client: GHD Midland

Project: Galaxy to Hearn

Sample ID: <b>MB-47134</b>		SampType: <b>MBLK</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>PBS</b>		Batch ID: <b>47134</b>		RunNo: <b>62503</b>						
Prep Date: <b>8/28/2019</b>		Analysis Date: <b>8/28/2019</b>		SeqNo: <b>2126703</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-47134</b>		SampType: <b>LCS</b>		TestCode: <b>EPA Method 300.0: Anions</b>						
Client ID: <b>LCSS</b>		Batch ID: <b>47134</b>		RunNo: <b>62503</b>						
Prep Date: <b>8/28/2019</b>		Analysis Date: <b>8/28/2019</b>		SeqNo: <b>2126704</b>			Units: <b>mg/Kg</b>			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.6	90	110			

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 2 of 2



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD MIDLAND

Work Order Number: 1908G19

RcptNo: 1

Received By: *Daniel M.* 8/28/2019 8:45:00 AMCompleted By: *Michelle Garcia* 8/28/2019 9:38:31 AMReviewed By: *ENM* 8/28/19*Michelle Garcia*

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐  
5. Sample(s) in proper container(s)? Yes ☒ No ☐  
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐  
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒  
10. Were any sample containers received broken? Yes ☐ No ☒  
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐  
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
13. Is it clear what analyses were requested? Yes ☒ No ☐  
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved bottles checked for pH: \_\_\_\_\_  
( $<2$  or  $>12$  unless noted)  
Adjusted? \_\_\_\_\_  
Checked by: *mg 08/28/19*

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:	_____	Date:	_____
By Whom:	_____	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	_____		
Client Instructions:	_____		

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.7	Good	Yes			
2	4.0	Good	Yes			

Released to Imaging: 6/23/2023 8:59:01 AM

GHD

Address: 2135 South Loop 250 West Midland

Tx 79703

Phone #: 432 686 0086

email or Fax#: justin.nixon@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

## Accreditation

☐ NELAP      ☐ Other

□ EDD (Type)

Turn-Around Time:

☐ Standard ☒ Rush 24 hr

Project Name:
---------------

Galaxy to Hearn

Project #:

088210-84

**Project Manager:**





Justin Nixon

Sampler: Joshua Piza

On Ice: ☒ Yes ☐ No

Sample Temperature: 41-04-37°C / 44-04-40°C

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date	Time
8-26-19	1815			8/27/19	0900
Date:	Time:	Relinquished by:	Received by:	Date	Time
8/27/19	1910		 courier	8/28/19	8:4

Remarks:



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975      Fax 505-345-4107

## Analysis Request

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 06, 2019

James Orneles  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1908146

Dear James Orneles:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/3/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order: 1908146

Date Reported: 8/6/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908146**Lab ID:** 1908146-001**Collection Date:** 8/2/2019 9:20:00 AM**Client Sample ID:** S-088210-84-080219-JP-5B-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CJS

Chloride	ND	60		mg/Kg	20	8/5/2019 1:16:12 PM	46583
----------	----	----	--	-------	----	---------------------	-------

**Lab ID:** 1908146-002**Collection Date:** 8/2/2019 10:45:00 AM**Client Sample ID:** S-088210-84-080219-JP-1B-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CJS

Chloride	390	60		mg/Kg	20	8/5/2019 1:28:37 PM	46583
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**Lab ID:** 1908146-003**Collection Date:** 8/2/2019 1:50:00 PM**Client Sample ID:** S-088210-84-080219-JP-8-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CJS

Chloride	420	60		mg/Kg	20	8/5/2019 1:41:02 PM	46583
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 1 of 2

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 1908146  
06-Aug-19

Client: GHD Midland  
Project: Galaxy to Hearn

Sample ID: MB-46583	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 46583	RunNo: 61924
Prep Date: 8/5/2019	Analysis Date: 8/5/2019	SeqNo: 2100001 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-46583	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 46583	RunNo: 61924
Prep Date: 8/5/2019	Analysis Date: 8/5/2019	SeqNo: 2100002 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.6 90 110

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: **GHD MIDLAND**Work Order Number: **1908146**

RcptNo: 1

Received By: **Erin Melendrez**

8/3/2019 9:30:00 AM

Completed By: **Erin Melendrez**

8/5/2019 7:42:26 AM

Reviewed By: **DAD 8/5/19**

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted?

Checked by: **EJM 8/5/19**

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:

Date:

By Whom:

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.0	Good	Yes			







Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 14, 2019

James Orneles  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1908500

Dear James Orneles:

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/9/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order: 1908500

Date Reported: 8/14/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908500**Lab ID:** 1908500-001 **Collection Date:** 8/6/2019 9:45:00 AM**Client Sample ID:** S-088210-84-080619-JP-SW-19-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	370	60		mg/Kg	20	8/12/2019 5:29:59 PM	46719
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**Lab ID:** 1908500-002 **Collection Date:** 8/6/2019 10:05:00 AM**Client Sample ID:** S-088210-84-080619-JP-SW-20-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	370	60		mg/Kg	20	8/12/2019 6:32:01 PM	46719
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**Lab ID:** 1908500-003 **Collection Date:** 8/6/2019 10:12:00 AM**Client Sample ID:** S-088210-84-080619-JP-SW-21-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	8/12/2019 6:44:25 PM	46719
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**Lab ID:** 1908500-004 **Collection Date:** 8/6/2019 10:20:00 AM**Client Sample ID:** S-088210-84-080619-JP-SW-22-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	8/12/2019 6:56:50 PM	46719
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**Lab ID:** 1908500-005 **Collection Date:** 8/6/2019 10:35:00 AM**Client Sample ID:** S-088210-84-080619-JP-SW-23-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	8/13/2019 2:51:42 PM	46757
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 3

## Analytical Report

Lab Order: 1908500

Date Reported: 8/14/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908500**Lab ID:** 1908500-006**Collection Date:** 8/6/2019 1:45:00 PM**Client Sample ID:** S-088210-84-080619-JP-SW-24-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	540	60		mg/Kg	20	8/13/2019 3:53:45 PM	46757
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**Lab ID:** 1908500-007**Collection Date:** 8/6/2019 2:25:00 PM**Client Sample ID:** S-088210-84-080619-JP-SW-25-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	61		mg/Kg	20	8/13/2019 4:06:09 PM	46757
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 2 of 3

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**WO#: **1908500****14-Aug-19**

**Client:** GHD Midland  
**Project:** Galaxy to Hearn

Sample ID: <b>MB-46719</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46719</b>	RunNo: <b>62068</b>								
Prep Date: <b>8/12/2019</b>	Analysis Date: <b>8/12/2019</b>	SeqNo: <b>2106697</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-46719</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46719</b>	RunNo: <b>62068</b>								
Prep Date: <b>8/12/2019</b>	Analysis Date: <b>8/12/2019</b>	SeqNo: <b>2106698</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.5	90	110			

Sample ID: <b>MB-46757</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>46757</b>	RunNo: <b>62096</b>								
Prep Date: <b>8/13/2019</b>	Analysis Date: <b>8/13/2019</b>	SeqNo: <b>2108091</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: <b>LCS-46757</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>46757</b>	RunNo: <b>62096</b>								
Prep Date: <b>8/13/2019</b>	Analysis Date: <b>8/13/2019</b>	SeqNo: <b>2108092</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.0	90	110			

**Qualifiers:**

\* Value exceeds Maximum Contaminant Level.  
D Sample Diluted Due to Matrix  
H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
PQL Practical Quantitative Limit  
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD MIDLAND

Work Order Number: 1908500

RcptNo: 1

Received By: Daniel M

8/9/2019 8:30:00 AM

Completed By: Leah Baca

8/9/2019 10:25:32 AM

Reviewed By: LB

8/9/19

Leah Baca

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐  
5. Sample(s) in proper container(s)? Yes ☒ No ☐  
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐  
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒  
10. Were any sample containers received broken? Yes ☐ No ☒  
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐  
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
13. Is it clear what analyses were requested? Yes ☒ No ☐  
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:  
( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: DAD 8/9/19

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.2	Good	Yes			
2	5.5	Good	Yes			

Released to Imaging: 6/23/2023 8:59:01 AM

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 15, 2019

James Orneles  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1908716

Dear James Orneles:

Hall Environmental Analysis Laboratory received 5 sample(s) on 8/13/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order: 1908716

Date Reported: 8/15/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908716

**Lab ID:** 1908716-001 **Collection Date:** 8/9/2019 2:00:00 PM  
**Client Sample ID:** S-088210-84-080919-JP-SW-26-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	110	60		mg/Kg	20	8/14/2019 3:30:50 PM	46784

**Lab ID:** 1908716-002 **Collection Date:** 8/9/2019 2:05:00 PM  
**Client Sample ID:** S-088210-84-080919-JP-SW-27-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	ND	60		mg/Kg	20	8/14/2019 3:43:14 PM	46784

**Lab ID:** 1908716-003 **Collection Date:** 8/9/2019 2:15:00 PM  
**Client Sample ID:** S-088210-84-080919-JP-SW-28-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	460	60		mg/Kg	20	8/14/2019 3:55:39 PM	46784

**Lab ID:** 1908716-004 **Collection Date:** 8/9/2019 3:00:00 PM  
**Client Sample ID:** S-088210-84-080919-JP-SW-29-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	ND	60		mg/Kg	20	8/14/2019 7:01:50 PM	46784

**Lab ID:** 1908716-005 **Collection Date:** 8/9/2019 9:05:00 AM  
**Client Sample ID:** S-088210-84-080919-JP-SW-156-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
<b>EPA METHOD 300.0: ANIONS</b> Analyst: CAS							
Chloride	ND	60		mg/Kg	20	8/14/2019 7:14:14 PM	46784

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 1908716  
15-Aug-19

Client: GHD Midland  
Project: Galaxy to Hearn

Sample ID: MB-46784	SampType: MBLK	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 46784	RunNo: 62158
Prep Date: 8/14/2019	Analysis Date: 8/14/2019	SeqNo: 2109704 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-46784	SampType: LCS	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 46784	RunNo: 62158
Prep Date: 8/14/2019	Analysis Date: 8/14/2019	SeqNo: 2109705 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 91.1 90 110

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

# Sample Log-In Check List

Client Name: **GHD MIDLAND**Work Order Number: **1908716**

RcptNo: 1

Received By: **Erin Melendrez**

8/13/2019 09:35 AM

Completed By: **Leah Baca**

8/13/2019 12:45:49 PM

Reviewed By: **ENM**

8/13/19

## Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

## Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:  
( $<2$  or  $>12$  unless noted)

Adjusted?

Checked by: **76813/14**

## Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks:

## 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good	Yes			

## Chain-of-Custody Record

Client: GHD

Mailing Address: 2135 S Loop 250 W Midland

Tx 79703

Phone #: 432 686 0086

email or Fax#: james.ornelas@ghd.com

QA/QC Package:

☐ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance

☐ NELAC      ☐ Other☐ EDD (Type)

Turn-Around Time:

☒ Standard      ☒ Rush 3 day

Project Name:

Galaxy to Hearn

Project #:

088210-84

**Project Manager:**

James Ornelas

Sampler: Joshua Riga

On Ice: ☒ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF):  $37 - 1.5 / (CF) = 37^{\circ}\text{C}$ [illegible]Preservative  
Type

HEAL No.

1908711

Date	Time	Matrix	Sample Name	Type and #	Type	
8-9-19	1400	S	S-088210-84-080919-JP-SW-26-3	1st Sample bag	NA	1908716-001
↓	1405	↓	S-088210-84-080919-JP-SW-27-3	↓	↓	-002
↓	1415	↓	S-088210-84-080919-JP-SW-28-3	↓	↓	-003
↓	1500	↓	S-088210-84-080919-JP-SW-29-3	↓	↓	-004
↓	905	↓	S-088210-84-080919-JP-SW-56-3	↓	↓	-005

## HALL ENVIRONMENTAL ANALYSIS LABORATORY

[www.hallenvironmental.com](http://www.hallenvironmental.com)

4901 Hawkins NE - Albuquerque, NM 87109


Tel. 505-345-3975      Fax 505-345-4107

## Analysis Request

[illegible]

Date:	Time:	Relinquished by:
6-2-19	0700	<i>[Signature]</i>

Date:	Time:	Relinquished by:
9-12-91	1700	W. L. H.

Received by:	Via:	Date	Time
		8/12/14	0930

Received by: WTH via courier Date 8/13/94 Time 0935

Remarks:
----------



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 16, 2019

Justin Nixon  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX

RE: Galaxy to Hearn

OrderNo.: 1908846

Dear Justin Nixon:

Hall Environmental Analysis Laboratory received 4 sample(s) on 8/15/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order: 1908846

Date Reported: 8/16/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908846**Lab ID:** 1908846-001 **Collection Date:** 8/12/2019 9:55:00 AM**Client Sample ID:** S-088210-84-081219-JP-SW-28b-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	480	60		mg/Kg	20	8/15/2019 6:18:54 PM	46826
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**Lab ID:** 1908846-002 **Collection Date:** 8/12/2019 10:40:00 AM**Client Sample ID:** S-088210-84-081219-JP-SW-29b-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	ND	60		mg/Kg	20	8/15/2019 6:31:19 PM	46826
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**Lab ID:** 1908846-003 **Collection Date:** 8/13/2019 11:15:00 AM**Client Sample ID:** S-088210-84-081319-JP-SW-30-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	100	60		mg/Kg	20	8/15/2019 6:43:43 PM	46826
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**Lab ID:** 1908846-004 **Collection Date:** 8/13/2019 10:55:00 AM**Client Sample ID:** S-088210-84-081319-JP-SW-31-3 **Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
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**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	92	60		mg/Kg	20	8/15/2019 6:56:07 PM	46826
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Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 2

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 1908846  
16-Aug-19

Client: GHD Midland  
Project: Galaxy to Hearn

Sample ID: MB-46826	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 46826	RunNo: 62163
Prep Date: 8/15/2019	Analysis Date: 8/15/2019	SeqNo: 2111412 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-46826	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 46826	RunNo: 62163
Prep Date: 8/15/2019	Analysis Date: 8/15/2019	SeqNo: 2111413 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.6 90 110

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: **GHD MIDLAND**Work Order Number: **1908846**RcptNo: **1**Received By: **Danie M.**

8/15/2019 8:30:00 AM

Completed By: **Erin Melendrez**

8/15/2019 9:21:42 AM

Reviewed By: **ENM**

8/15/19

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH: \_\_\_\_\_  
( $<2$  or  $>12$  unless noted)

Adjusted? \_\_\_\_\_

Checked by: **DAD 8/15/19**

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			
2	4.3	Good	Yes			
3	4.5	Good	Yes			

Released to Imaging: 6/23/2023 8:59:01 AM

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 19, 2019

Justin Nixon  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1908847

Dear Justin Nixon:

Hall Environmental Analysis Laboratory received 2 sample(s) on 8/15/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a light blue horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109

## Analytical Report

Lab Order: 1908847

Date Reported: 8/19/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908847**Lab ID:** 1908847-001**Collection Date:** 8/14/2019 9:25:00 AM**Client Sample ID:** S-088210-84-081419-JP-SW-34-4'**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
----------	--------	----	------	-------	----	---------------	----------

**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	100	60		mg/Kg	20	8/16/2019 2:22:47 AM	46834
----------	-----	----	--	-------	----	----------------------	-------

**Lab ID:** 1908847-002**Collection Date:** 8/14/2019 8:37:00 AM**Client Sample ID:** S-088210-84-081419-JP-SW-32-3'**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
----------	--------	----	------	-------	----	---------------	----------

**EPA METHOD 300.0: ANIONS**

Analyst: CAS

Chloride	330	60		mg/Kg	20	8/16/2019 2:35:11 AM	46834
----------	-----	----	--	-------	----	----------------------	-------

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 2

QC SUMMARY REPORT  
Hall Environmental Analysis Laboratory, Inc.

WO#: 1908847  
19-Aug-19

Client: GHD Midland  
Project: Galaxy to Hearn

Sample ID: MB-46834	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 46834	RunNo: 62163
Prep Date: 8/15/2019	Analysis Date: 8/16/2019	SeqNo: 2111451 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-46834	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 46834	RunNo: 62163
Prep Date: 8/15/2019	Analysis Date: 8/16/2019	SeqNo: 2111452 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 95.5 90 110

Qualifiers:

- \*

Value exceeds Maximum Contaminant Level.
- D

Sample Diluted Due to Matrix
- H

Holding times for preparation or analysis exceeded
- ND

Not Detected at the Reporting Limit
- PQL

Practical Quantitative Limit
- S

% Recovery outside of range due to dilution or matrix
- B

Analyte detected in the associated Method Blank
- E

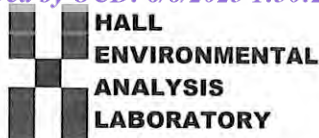
Value above quantitation range
- J

Analyte detected below quantitation limits
- P

Sample pH Not In Range
- RL

Reporting Limit





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: GHD

Work Order Number: 1908847

RcptNo: 1

Received By: Daniel M.

8/15/2019 8:30:00 AM

Completed By: Erin Melendrez

8/15/2019 9:31:33 AM

Reviewed By: ENM

8/15/19

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

(<2 or >12 unless noted)

Adjusted? \_\_\_\_\_

Checked by: DAD 8/15/19

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: \_\_\_\_\_

Date: \_\_\_\_\_

By Whom: \_\_\_\_\_

Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: \_\_\_\_\_

Client Instructions: \_\_\_\_\_

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good	Yes			
2	4.3	Good	Yes			
3	4.5	Good	Yes			

Released to Imaging: 6/23/2023 8:59:01 AM

☐ EDD (Type) \_\_\_\_\_

✓ Courier 8/15/19 8:30

is possibility. Any sub-contracted data will be clearly notated on the analytical report.

Received by OCD: 6/8/2023 1:30:25 PM

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Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: [www.hallenvironmental.com](http://www.hallenvironmental.com)

August 06, 2019

James Orneles  
GHD Midland  
2135 S Loop 250 W  
Midland, TX 79703  
TEL: (432) 686-0086  
FAX:

RE: Galaxy to Hearn

OrderNo.: 1908146

Dear James Orneles:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/3/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to [www.hallenvironmental.com](http://www.hallenvironmental.com) or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a horizontal line.

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order: 1908146

Date Reported: 8/6/2019

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** GHD Midland  
**Project:** Galaxy to Hearn

**Lab Order:** 1908146**Lab ID:** 1908146-001**Collection Date:** 8/2/2019 9:20:00 AM**Client Sample ID:** S-088210-84-080219-JP-5B-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
----------	--------	----	------	-------	----	---------------	----------

**EPA METHOD 300.0: ANIONS**

Analyst: CJS

Chloride	ND	60		mg/Kg	20	8/5/2019 1:16:12 PM	46583
----------	----	----	--	-------	----	---------------------	-------

**Lab ID:** 1908146-002**Collection Date:** 8/2/2019 10:45:00 AM**Client Sample ID:** S-088210-84-080219-JP-1B-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
----------	--------	----	------	-------	----	---------------	----------

**EPA METHOD 300.0: ANIONS**

Analyst: CJS

Chloride	390	60		mg/Kg	20	8/5/2019 1:28:37 PM	46583
----------	-----	----	--	-------	----	---------------------	-------

**Lab ID:** 1908146-003**Collection Date:** 8/2/2019 1:50:00 PM**Client Sample ID:** S-088210-84-080219-JP-8-3**Matrix:** SOIL

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch ID
----------	--------	----	------	-------	----	---------------	----------

**EPA METHOD 300.0: ANIONS**

Analyst: CJS

Chloride	420	60		mg/Kg	20	8/5/2019 1:41:02 PM	46583
----------	-----	----	--	-------	----	---------------------	-------

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Page 1 of 2

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1908146

06-Aug-19

Client: GHD Midland  
Project: Galaxy to Hearn

Sample ID: MB-46583	SampType: mblk	TestCode: EPA Method 300.0: Anions
Client ID: PBS	Batch ID: 46583	RunNo: 61924
Prep Date: 8/5/2019	Analysis Date: 8/5/2019	SeqNo: 2100001 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	ND	1.5

Sample ID: LCS-46583	SampType: lcs	TestCode: EPA Method 300.0: Anions
Client ID: LCSS	Batch ID: 46583	RunNo: 61924
Prep Date: 8/5/2019	Analysis Date: 8/5/2019	SeqNo: 2100002 Units: mg/Kg
Analyte	Result	PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride	14	1.5 15.00 0 93.6 90 110

Qualifiers:

- \* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank

E Value above quantitation range

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit





Hall Environmental Analysis Laboratory  
4901 Hawkins NE  
Albuquerque, NM 87109  
TEL: 505-345-3975 FAX: 505-345-4107  
Website: www.hallenvironmental.com

## Sample Log-In Check List

Client Name: **GHD MIDLAND**Work Order Number: **1908146**

RcptNo: 1

Received By: **Erin Melendrez**

8/3/2019 9:30:00 AM

*UAG*Completed By: **Erin Melendrez**

8/5/2019 7:42:26 AM

*UAG*Reviewed By: **DAD 8/5/19**

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

### Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☒ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
9. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
10. Were any sample containers received broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted?

Checked by: **EJM 8/5/19**

### Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

16. Additional remarks:

### 17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.0	Good	Yes			

## Chain-of-Custody Record

Turn-Around Time:

Client:

GHD

☐ Standard ☒ Rush 24hr

Mailing Address:

2135 S Loop 250 W

Project Name:

Galaxy to Hearn

Midland Tx 74703

Project #:

088210-84

Phone #:

452 676 00

email or Fax#:

james.ornelas@ghd.com

Project Manager:

James Ornelas

QA/QC Package:

☐ Standard☐ Level 4 (Full Validation)

Accreditation:

☐ Az Compliance☐ NELAC☐ Other☐ EDD (Type)

Sampler:

Joshua Pigg

On Ice:

☒ Yes☐ No

# of Coolers:

1

Cooler Temp (including CF):

4.1-0.1/CF=4.0°C

Container Type and #

Preservative Type

HEAL No.

1908146

Date

Time

Matrix

Sample Name

8-2-19 920

S

S-088210-84-080219-JP-SW-5b-3

1st Sample bag

NA

-001

8-2-19 1045

S

S-088210-84-080219-JP-SW-1b-3

NA

-002

8-2-19 1350

S

S-088210-84-080219-JP-SW-8-3

NA

-003



## HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

## Analysis Request

BTEX / MTBE / TMB's (8021)

TPH:8015D(GRO / DRO / MRO)

8081 Pesticides/8082 PCB's

EDB (Method 504.1)

PAHs by 8310 or 8270SIMS

RCRA 8 Metals

Cl, F, Br, NO<sub>3</sub>, NO<sub>2</sub>, PO<sub>4</sub>, SO<sub>4</sub>

8260 (VOA)

8270 (Semi-VOA)

Total Coliform (Present/Absent)

chloride 300

X

X

X

Date:

Time:

Relinquished by:

8-2-19 1515

Received by:

Via:

Date

Time

8/2/19 1515

Remarks:

Sample SW-5b-3 is 5"b" as in the letter instead of 56 the number; same as SW-1b-3

Date:

Time:

Relinquished by:

8/2/19 1940

Received by:

Via:

courier

Date

Time

8/3/19 0930

## Appendix **E**

# **Photographic Log**





**Photo 1 – Impacted access road area prior to excavation. View facing south-southeast.**



**Photo 2 – Southern access road excavation. View facing north.**



## Site Photographs



Date & Time: Tue Aug 13 14:57:16 MDT 2019  
Position: +032.19380° / -103.56740°  
Altitude: 3531ft  
Datum: WGS-84  
Azimuth/Bearing: 027° N27E 0480mils (True)  
Zoom: 1X  
Galaxy to Hearn's  
EOG  
Excavation



**Photo 3 – Excavation adjacent to CR 2. View facing north.**



## Site Photographs



## Appendix F

# Waste Disposal Manifests

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EO9 CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8/15/14

WORK LOCATION(NAME) The Galaxy Learning Child Life API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY LCA STATE NA

Facility Contact

Date:

Signature

James Kandy

Disposal Site

Date:

Signature

Sundnes

Yardage: 20

Truck #: 21

Driver's Signature

Manifest Number: **0364**

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8-19-19

WORK LOCATION (NAME) The Galaxy to hears Flat line API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact \_\_\_\_\_

James Kennedy  
432-484-9146

Date:

Signature

Disposal Site \_\_\_\_\_

Sun Dance

Date:

Signature

Yardage: 20

Truck #: 039

Ruben Hensley  
Driver's Signature

Manifest Number: 0280



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 8-19-19  
WORK LOCATION (NAME) The Galaxy to hearus flat line API# \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
	Signature _____
Disposal Site	
<u>Sun Dance</u>	Date: _____
	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>039</u>
	Driver's Signature <u>Ruben Morales</u>

Manifest Number: 0283

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8-19-19

WORK LOCATION (NAME) The Galaxy to hears plot line API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	Date:
<u>James Kennedy</u>	
	Signature

Disposal Site	Date:
<u>Sun Dance</u>	
	Signature
	Yardage: <u>20</u>
	Truck #: <u>939</u>
	Driver's Signature <u>Ruben Hozalek</u>

Manifest Number: 0282



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8-19-19

WORK LOCATION (NAME) The Galaxy to hearns flat line API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	Date:
<u>James Kennedy</u>	
<u>432-487-1111</u>	Signature

Disposal Site	Date:
<u>Sun Dance</u>	Signature
<u>kg</u>	Yardage: <u>20</u>
	Truck #: <u>039</u>
	Driver's Signature <u>Ruben Gonzalez</u>

Manifest Number: 0281

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy to Hens Flatline DATE 8-18-19  
WORK LOCATION(NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Loc STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
<u>(505) 484-9146</u>	Signature _____

Disposal Site	
<u>Sunclaire</u>	Date: _____
<u>by</u>	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>31</u>
	Driver's Signature _____
Manifest Number: <u>0805</u>	



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 8-16-19  
WORK LOCATION (NAME) The Galaxy to heavens flat line API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact

James Kennedy

Date:

Signature

Disposal Site

Sun Dance

Date:

Signature

Yardage: 20

Truck #: 039

Driver's Signature

Manifest Number: 0279

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

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Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8/16/19

WORK LOCATION (NAME) The Galaxy to Heaven Flat line API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	Date:
<u>JAMES Kennedy</u>	
	Signature

Disposal Site	Date:
<u>Sundance</u>	
	Signature
	Yardage: <u>20</u>
	Truck #: <u>21</u>
	Driver's Signature
	Manifest Number: <u>0369</u>



Dirt Excavation • Environmental • Production Services

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Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER COG CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy Hollows flat line DATE 8-16-19  
WORK LOCATION (NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact

James Kennedy  
(505) 484-9141

Date:

Signature

Disposal Site

Sundance

Date:

Signature

Yardage:

Truck #:

Driver's Signature

Manifest Number: **0804**



Dirt Excavation • Environmental • Production Services

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6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EDG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8-16-19

WORK LOCATION (NAME) The Galaxy to hearus Flatline API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	Date:
<u>James Kennedy</u>	
	Signature

Sprial Site	Date:
<u>Sun Dance</u> <u>VZ</u>	
	Signature
	Yardage: <u>20</u>
	Truck #: <u>039</u>
	Driver's Signature <u>Ruben Gonzalez</u>

Manifest Number: 0278

Dirt Excavation • Environmental • Production Services

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Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER Eog CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8/9/14

WORK LOCATION (NAME) The Galaxy to Learn LA/ Flot API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact \_\_\_\_\_

James Kennedy \_\_\_\_\_  
Date: \_\_\_\_\_  
Signature \_\_\_\_\_

Disposal Site \_\_\_\_\_

Sundance \_\_\_\_\_  
Date: \_\_\_\_\_  
Signature \_\_\_\_\_

Yardage: 20  
Truck #: 21

[Signature]  
Driver's Signature

Manifest Number: **0361**



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Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER Eog CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8/9/19

WORK LOCATION (NAME) The Century to Lane LAR Flat API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact \_\_\_\_\_

James Kennedy \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Date: \_\_\_\_\_  
Signature \_\_\_\_\_

Disposal Site \_\_\_\_\_

SEA DANGER \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Date: \_\_\_\_\_  
Signature \_\_\_\_\_  
Yardage: 20  
Truck #: 21  
Driver's Signature \_\_\_\_\_

Manifest Number: 0362

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 8-28-19  
WORK LOCATION (NAME) The Galaxy to hearing flat line API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
	Signature _____
Disposal Site	
<u>Sun Dance</u>	Date: _____
	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>039</u>
	<u>Ruben Hernandez</u> Driver's Signature

Manifest Number: 0291



Dirt Excavation • Environmental • Production Services

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6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 8-28-19  
WORK LOCATION (NAME) The Galaxy to hearas API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kenedy</u>	Date: _____
	Signature _____
Disposal Site	
<u>Sun Dance</u>	Date: _____
	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>039</u>
	<u>Ruben Gonzalez</u> Driver's Signature

Manifest Number: **0290**



Dirt Excavation • Environmental • Production Services

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Hobbs, NM 88240  
Office: 575-393-8420**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_ADDRESS The Galaxy to Heins Flt line DATE 8-30-19

WORK LOCATION (NAME) \_\_\_\_\_ API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM**Facility Contact**Louise Kennedy

Date: \_\_\_\_\_

(505) 258-9546

Signature \_\_\_\_\_

**Disposal Site**Sundance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20Truck # 21

Driver's Signature \_\_\_\_\_

Manifest Number: **0476**



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER FCG CUSTOMER \_\_\_\_\_  
ADDRESS 5509 Champions Dr. Midland TX DATE 8/28/19  
WORK LOCATION (NAME) Galaxy 10 Hears Flat Hare API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

**Facility Contact**

Thomas Kennedy (432) 258-4346

Date: 8/28/19

Signature \_\_\_\_\_

**Disposal Site**

Date: 8/28/19

Signature \_\_\_\_\_

Yardage: 12

Truck #: 022

Driver's Signature [Signature]

Manifest Number: **0515**

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**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER EOH CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy to Heaven Flat line DATE 7-27-19  
WORK LOCATION (NAME) \_\_\_\_\_ API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY LOS STATE NM

**Facility Contact**

Turnips removed  
(132) 484-9146

Date:

Signature

**Disposal Site**

Sundance

Date:

Signature

Yardage: 20Truck #: 30

Driver's Signature

Manifest Number: **0417**



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER 109 CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7.27.2019

WORK LOCATION(NAME) T/O GALAXY TO HEADINS PLATINE API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY LEA STATE NM

Facility Contact

Date:

Signature

Disposal Site

Date:

Signature

Yardage: 20

Truck #: C/O

Driver's Signature

Manifest Number: 0208

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**SDR Enterprises, LLC.**

6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER E06 CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7-27-19

WORK LOCATION (NAME) Galaxy + O Hearn's Flat API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact \_\_\_\_\_

James Kennedy  
432-484-9146

Date: \_\_\_\_\_  
Signature \_\_\_\_\_

Disposal Site \_\_\_\_\_

Sundance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20 yards

Truck #: 024

Adrian Rupp  
Driver's Signature

Manifest Number: **0189**



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6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 7-27-19  
WORK LOCATION (NAME) The Galaxy to hearings Flat line API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
<u>432-484-9146</u>	Signature _____
Disposal Site	
<u>Sun Vance</u>	Date: _____
<u>h2</u>	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>031</u>
	Driver's Signature <u>Ruben Gonzalez</u>

Manifest Number: 0555

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6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER Log CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7.27.2019

WORK LOCATION (NAME) The galaxy to hennas PLATINE API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY LIA STATE NM

Facility Contact \_\_\_\_\_

Date:

Signature

5 ARKS 1900004

Disposal Site \_\_\_\_\_

Date:

Signature

Yardage: 20

Truck # 910

Driver's Signature

Manifest Number: 0207



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Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 7-27-19  
WORK LOCATION (NAME) The Galaxy to hears Flat Line API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	Date:
<u>James Kennedy</u>	Signature
<u>432-484-9146</u>	
Disposal Site	Date:
<u>Sun Dance</u>	Signature
<u>WB</u>	Yardage: <u>20</u>
	Truck #: <u>031</u>
	<u>Ruben Gonzalez</u> Driver's Signature

Manifest Number: 0554

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6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy to Heavens Flat line DATE 7-27-19  
WORK LOCATION(NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY \_\_\_\_\_ STATE \_\_\_\_\_

**Facility Contact**

James Kennedy  
(132) 484-9116

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**

Sundance

Date: 7-27-19

Signature \_\_\_\_\_

Yardage: 20

Truck #: 130

Driver's Signature \_\_\_\_\_

Manifest Number: **0416**

Dirt Exca

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420

CUSTOMER F06

ADDRESS \_\_\_\_\_

WORK LOCATION (NAME) Galaxy 70 H

CITY (IF APPLICABLE) \_\_\_\_\_

Facility Contact

James Kennedy  
432-484-9146

Disposal Site

Sundance



tion • Environmental • Production Services



# MANIFEST

Lic. #386707

CUSTOMER \_\_\_\_\_

DATE 7-27-19

Wings Flat Line API # \_\_\_\_\_

COUNTY Lea STATE NM

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20 yards

Truck #: 024

[Signature]  
Driver's Signature

Manifest Number: **0188**



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER E-m CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 7-26-2019  
WORK LOCATION (NAME) The galaxy To heains facility API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY LEA STATE NM

Facility Contact	Date:
	Signature
Disposal Site	Date:
<u>Sandance</u>	Signature
<u>Conce, NM</u>	Yardage: <u>20</u>
	Truck #: <u>CIC</u>
	Driver's Signature <u>THX KAS95</u>

Manifest Number: 0206

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy to Hearn's Flat lines DATE 7-26-19  
WORK LOCATION(NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	Date:
<u>James Kennedy</u>	
<u>432 484-9146</u>	Signature _____

Disposal Site	Date:
<u>Sundance</u>	<u>Irving Lopez</u> Signature
	Yardage: <u>20</u>
	Truck #: <u>30</u>
	Driver's Signature _____

Manifest Number: **0415**



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6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER EOC CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 7-26-19  
WORK LOCATION (NAME) The Galaxy To Hearn's At Line API# \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
<u>432-484-9146</u>	Signature _____
Disposal Site	
<u>Sundance Farm NM</u>	Date: <u>7-26-19</u>
	Signature <u>Manda Carter</u>
	Yardage: <u>20</u>
	Truck #: <u>36</u>
	Driver's Signature <u>Manda Carter</u>

Manifest Number: 0742

Dirt Excavation • Environmental • Production Services

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6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 7-26-19  
WORK LOCATION (NAME) The Galaxy to hearus Flat Line API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	Date:
<u>James Kennedy</u>	
<u>432-484-9146</u>	Signature _____
Spposal Site	Date:
<u>Sun Dance</u>	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>031</u>
	Driver's Signature <u>Ruben Gonzalez</u>

Manifest Number: 0553



Dirt Excav

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420

CUSTOMER EOG

ADDRESS \_\_\_\_\_

WORK LOCATION(NAME) \_\_\_\_\_

CITY (IF APPLICABLE) The Galaxy to hear

Facility Contact

James Konner  
432-484-9116

Disposal Site

Sun dance

ation • Environmental • Production Services

# MANIFEST

Lic. #386707



CUSTOMER \_\_\_\_\_

DATE 7-26-19

API # \_\_\_\_\_

COUNTY Lea STATE NM

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20

Truck #: 031

Ruben Gonzalez  
Driver's Signature

Manifest Number: 0552

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS The Galaxy to Heaven Line DATE 7-26-19

WORK LOCATION(NAME) \_\_\_\_\_ API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY lea STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
<u>432) 484 9146</u>	Signature _____

Disposal Site	
<u>Sunderco</u>	Date: <u>7-26-19</u>
<u>WJ</u>	Signature _____
	Yardage: <u>20</u>
	Truck # <u>30</u>
	Driver's Signature _____

Manifest Number: **0414**



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6222 S. Bronco Dr.

Hobbs, NM 88240

Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER ECG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7-26-2019

WORK LOCATION(NAME) THE GALAXY TOWNS PLANT API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY LEA STATE NM

Facility Contact \_\_\_\_\_

Date:

Signature

Disposal Site \_\_\_\_\_

Date:

Signature

Yardage: 20

Truck #: 10

Driver's Signature

Manifest Number: 0205



Dirt Excavation • Environmental • Production Services

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Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER FC9 CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7-26-2019

WORK LOCATION(NAME) The galaxy 70 HEAINS PLATINE API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY KA STATE NM

Facility Contact \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Date: \_\_\_\_\_  
Signature \_\_\_\_\_

Disposal Site JAMES KENNEDY

SUNDANCE

LENICE, NM

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Date: \_\_\_\_\_  
Signature \_\_\_\_\_

Yardage: 20

Truck #: 10

TYLER YAGER  
Driver's Signature

Manifest Number: 0204

Released to Imaging: 6/23/2023 8:59:01 AM

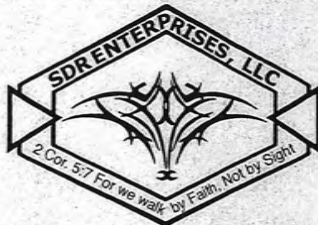




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6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7-26-19

WORK LOCATION (NAME) The Galaxy to hearns Flat <sup>Line</sup> API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

**Facility Contact**

Date: \_\_\_\_\_

James Kennedy  
432-484-9196

Signature \_\_\_\_\_

**Disposal Site**

Date: \_\_\_\_\_

SUN dance

Signature \_\_\_\_\_

Yardage: 20

Truck #: 031

W  
Ruben H. Hargale  
Driver's Signature

Manifest Number: 0551



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy to Heavens Flat line DATE 7-26-19  
WORK LOCATION(NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kennedy</u>	Date:
<u>432) 984-9146</u>	Signature
Disposal Site	
<u>Sundance</u>	Date: <u>Living Lopez</u>
	Signature
	Yardage: <u>20</u>
	Truck # <u>70</u>
	Driver's Signature
Manifest Number: <u>0413</u>	

Dirt Excavation • Environmental • Production Services

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Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER E06 CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 7-25-19  
WORK LOCATION (NAME) Galaxy to Hearn's Flat line API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
<u>432-484-9146</u>	Signature _____
Disposal Site	
<u>Sundance</u>	Date: _____
	Signature _____
	Yardage: <u>20 yards</u>
	Truck #: <u>029</u>
	<u>Adrian M.</u> Driver's Signature

Manifest Number: 0187



Dirt Excavation • Environmental • Production Services

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6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7-25-19

WORK LOCATION(NAME) \* THE GALAXY TO HEARNS FLAT LIVE API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY lea STATE NM

**Facility Contact**

James Kennedy  
432-484-9196

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**

Sundance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20

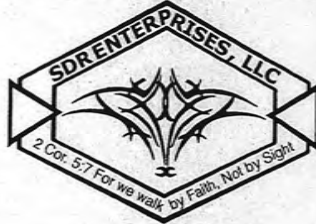
Truck #: 031

Ruben Gonzalez  
Driver's Signature

Manifest Number: 0725

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy to Hearts Flat line DATE 7-25-19  
WORK LOCATION(NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>Tammy Kennedy</u>	Date: _____
<u>432) 484 9146</u>	Signature _____
Disposal Site	
<u>Sundance</u>	Date: _____
<u>Veg</u>	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>30</u>
	Driver's Signature <u>Irving Lopez</u>
	Manifest Number: <b>0412</b>



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6222 S. Bronco Dr.

Hobbs, NM 88240

Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER E06 CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7-25-19

WORK LOCATION (NAME) Galaxy to Heurns Flat Line API# \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact \_\_\_\_\_

James Kennedy  
432-484-9146

Date:

Signature

Disposal Site \_\_\_\_\_

Sundance

Date:

Signature

Yardage: 20 YARDS

Truck #: 024

Delia M  
Driver's Signature

Manifest Number: 0186

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EQG CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 7-25-19  
WORK LOCATION (NAME) THE GALAXY TO HEARNS FLAT LINE API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY LEA STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
<u>432-484 9196</u>	Signature _____
Disposal Site	
<u>Sun Dance</u>	Date: _____
<u>20</u>	Signature _____
<u>031</u>	Yardage: _____
<u>Ruben Gonzalez</u>	Truck #: _____
<u>Driver's Signature</u>	Driver's Signature _____
Manifest Number: <u>0724</u>	



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS The Brewery to the Flat line DATE 7-25-19  
WORK LOCATION(NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY lea STATE NM

**Facility Contact**

James Kennedy

Date: \_\_\_\_\_

432) 484-9146

Signature \_\_\_\_\_

**Disposal Site**

Sundance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20

Truck #: 30

Driver's Signature \_\_\_\_\_

Manifest Number: **0411**

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EQG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7-25-19

WORK LOCATION (NAME) \*THE GALAXY TO HEARNS FLAT LINE API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY lea STATE NM

Facility Contact

James Kennedy  
432-484-9196

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Disposal Site

Sundance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20

Truck # 031

Driver's Signature

Ruben Harsalez

Manifest Number: 0723



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.

Hobbs, NM 88240

Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER COG CUSTOMER \_\_\_\_\_  
 ADDRESS The Galaxy to Hearn's Flat line DATE 7-25-19  
 WORK LOCATION(NAME) \_\_\_\_\_ API # \_\_\_\_\_  
 CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY lea STATE NM

**Facility Contact**

James Kennedy

(32) 484-9146

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**

Sundance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20

Truck #: 130

Driver's Signature \_\_\_\_\_

Manifest Number: **0410**

Dirt Exca

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.

Hobbs, NM 88240

Office: 575-393-8420

CUSTOMER

EOG

ADDRESS

WORK LOCATION (NAME)

Galaxy 1011

CITY (IF APPLICABLE)

Facility Contact

James Kennedy

Disposal Site

Sundance

vation • Environmental • Production Services



MANIFEST

Lic. #386707

CUSTOMER \_\_\_\_\_

DATE

7-25-19

earns Release API # \_\_\_\_\_

COUNTY Lea

STATE

NM

Date:

Signature

Date:

Signature

Yardage:

20 yards

Truck #:

024

Driver's Signature

Manifest Number: 0185



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER SDR CUSTOMER \_\_\_\_\_  
ADDRESS 6222 S Bronco DATE 7.24.19  
WORK LOCATION (NAME) The Galaxy To Floor Flat Line API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY 20 STATE \_\_\_\_\_

Facility Contact	
<u>Sundance Eunice</u>	Date: <u>7-24-19</u>
<u>James Kennel</u>	<u>[Signature]</u>
<u>432-484-9146</u>	Signature _____

Disposal Site	
<u>Sundance NM Eunice</u>	Date: <u>7-24-19</u>
	<u>[Signature]</u>
	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>36</u>
	<u>[Signature]</u>
	Driver's Signature _____

Manifest Number: 0409



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER E06 CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 7-24-19

WORK LOCATION (NAME) Galaxy 40 Housings Release API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: <u>7-24-19</u>
<u>432-</u>	<u>[Signature]</u>
	Signature _____

Disposal Site	
<u>Sundance</u>	Date: _____
	Signature _____
	Yardage: <u>20 yards</u>
	Truck #: <u>024</u>
	<u>[Signature]</u>
	Driver's Signature _____

Manifest Number: 0184



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy follow n. 1 lot line DATE 7-24-14  
WORK LOCATION (NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY lea STATE nm

Facility Contact	
<u>James Kennedy</u>	Date: <u>7-24-14</u>
<u>(505) 484 9196</u>	<u>E. Gallo</u> Signature

Disposal Site	
<u>Sundance</u>	Date: _____
	Signature _____
	Yardage: <u>20</u>
	Truck # <u>30</u>
	Driver's Signature _____
Manifest Number: <u>0408</u>	



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS The Galaxy to Herons Flatline DATE 7-24-19

WORK LOCATION (NAME) \_\_\_\_\_ API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

**Facility Contact**

James Kennedy  
(505) 989-9146

Date:

7-24-19  
[Signature]  
Signature

**Disposal Site**

Sundance

Date:

Signature

Yardage:

Truck #:

Driver's Signature

Manifest Number: 0407



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER E06 CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 7-24-19  
WORK LOCATION (NAME) Galaxy to Hears Release API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kennedy</u> <u>432-484-9146</u>	Date: <u>7-24-19</u>
	<u>E. Salendo</u> Signature

Disposal Site	
<u>Sun dora</u>	Date: _____
	Signature _____
	Yardage: <u>20 yds</u>
	Truck #: <u>026</u>
	<u>Adrian NM</u> Driver's Signature

Manifest Number: 0183



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



Lic. #386707

**MANIFEST**

CUSTOMER E O G CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 7-24-19  
WORK LOCATION (NAME) Galaxy to Hearn's Release API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Leu STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: <u>7-24-19</u>
<u>432-484-9146</u>	<u>E. M. [Signature]</u>
	Signature

Disposal Site	
<u>Sundance</u>	Date: _____
	Signature _____
	Yardage: <u>20,000</u>
	Truck #: <u>029</u>
	<u>[Signature]</u>
	Driver's Signature

Manifest Number: 0182



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy To Hears Flat lno DATE 7-24-19  
WORK LOCATION (NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY lea STATE nm

Facility Contact	
<u>James Kennedy</u>	Date: <u>7-24-19</u>
<u>432 484 9146</u>	<u>E. Kennedy</u>
	Signature

Disposal Site	
<u>Sevidence</u>	Date:
	Signature
	Yardage: <u>20</u>
	Truck #: <u>30</u>
	Driver's Signature: <u>[Signature]</u>

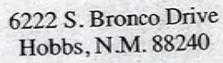
Manifest Number: 0406

[illegible]



[illegible]





Hours Worked	@ \$	Per Hour	\$		DATE
RUCKER	A F TRUCKING LLC	YD. DUMP TRUCK	12		8-19-19
ADDRESS	323 E WOLF CANYON DR Hobbs NM 8834				
COMPANY	Eog	LEASE			THE GALAXY HOLDINGS LLC
ADDRESS					
COMPANY		LEASE			
ADDRESS					
				COMPANY	TOTAL

[illegible]

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420

Lic. #386707

**MANIFEST**CUSTOMER EOG CUSTOMER \_\_\_\_\_ADDRESS \_\_\_\_\_ DATE 8-15-19WORK LOCATION (NAME) The Galaxy to hearings flat line API # \_\_\_\_\_CITY (IF APPLICABLE) ~~Albuquerque~~ COUNTY Lea STATE NM**Facility Contact**James Kennedy

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**Son Dance

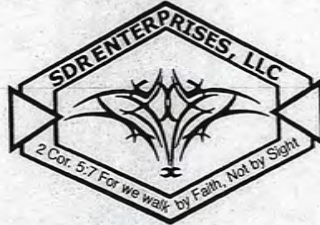
Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20  
Truck #: 039Ruben Hernandez  
Driver's SignatureManifest Number: **0575**



Dirt Excavation • Environmental • Production Services

**MANIFEST****SDR Enterprises, LLC.**6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420

Lic. #386707

CUSTOMER Eog CUSTOMER \_\_\_\_\_ADDRESS \_\_\_\_\_ DATE 8/15/19WORK LOCATION (NAME) The battery 2 - Lewis Fluv. line API # \_\_\_\_\_CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lra STATE NM**Facility Contact**

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**Date: 8/15/19

Signature \_\_\_\_\_

Yardage: 20Truck #: 21Driver's Signature [Signature]

Manifest Number: 0366



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420

Lic. #386707

**MANIFEST**CUSTOMER EOG CUSTOMER \_\_\_\_\_ADDRESS \_\_\_\_\_ DATE 8-15-19WORK LOCATION (NAME) The Galaxy to hears Flat line API # \_\_\_\_\_CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM**Facility Contact**James Kennedy

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**Son Dance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20Truck #: 039Driver's Signature Ruben H. LopezManifest Number: **0574**

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.

Hobbs, NM 88240

Office: 575-393-8420



Lic. #386707

**MANIFEST**CUSTOMER EOG CUSTOMER \_\_\_\_\_ADDRESS The Galaxy follows flat line DATE 8-15-19

WORK LOCATION (NAME) \_\_\_\_\_ API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY lea STATE NM**Facility Contact**James Kennedy432/484-9146

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**Sundance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20Truck # 31

Driver's Signature \_\_\_\_\_

Manifest Number: **0800**



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
 6222 S. Bronco Dr.  
 Hobbs, NM 88240  
 Office: 575-393-8420

**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_  
 ADDRESS The Galaxy fullons flat line DATE 8-15-19  
 WORK LOCATION (NAME) \_\_\_\_\_ API # \_\_\_\_\_  
 CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

**Facility Contact**

Kimberly Kennedy  
432) 984-9146

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**

Sundance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20Truck # 31

Driver's Signature \_\_\_\_\_

Manifest Number: 0801



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC**6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420

Lic. #386707

**MANIFEST**CUSTOMER EOG CUSTOMER \_\_\_\_\_ADDRESS \_\_\_\_\_ DATE 8-27-19WORK LOCATION (NAME) The Galaxy to hearings flat line API # \_\_\_\_\_CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM**Facility Contact**James Kennedy

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**Sun Dance

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20Truck #: 039Ruben H. Horder  
Driver's SignatureManifest Number: 0287

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420**MANIFEST**

Lic. #386707

CUSTOMER 909 CUSTOMER \_\_\_\_\_ADDRESS \_\_\_\_\_ DATE 8/15/19WORK LOCATION(NAME) The Galaxy to hearer flat line API # \_\_\_\_\_CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM**Facility Contact**JAMES KUNDY

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**SUNDRkyDate: 8/15/19

Signature \_\_\_\_\_

Yardage: 20Truck #: 21Driver's Signature per J. KundyManifest Number: **0365**



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER Eog CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 8/16/19  
WORK LOCATION(NAME) The Galaxy to Lomax Flat line API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>JAMES Kennedy</u>	Date: _____
	Signature _____
Disposal Site	
<u>Sundance</u>	Date: _____
	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>21</u>
	Driver's Signature <u>[Signature]</u>

Manifest Number: 0368



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8-16-19

WORK LOCATION (NAME) The Galaxy to hearus flat line API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
_____	Signature _____

Disposal Site	
<u>Sun Dance</u>	Date: _____
<u>vhg</u>	Signature _____
_____	Yardage: <u>20</u>
_____	Truck #: <u>039</u>
_____	Driver's Signature <u>Ruben Gonzalez</u>

Manifest Number: **0277**

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.

Hobbs, NM 88240

Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS The Galaxy to Horns Flat line DATE 8-16-19

WORK LOCATION (NAME) \_\_\_\_\_ API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY lea STATE NM

**Facility Contact**

James Kennedy

482) 484 9146

Date: \_\_\_\_\_

Signature \_\_\_\_\_

**Disposal Site**

Sundance

VB

Date: \_\_\_\_\_

Signature \_\_\_\_\_

Yardage: 20

Truck #: 31

Driver's Signature \_\_\_\_\_

Manifest Number: 0803



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EO9 CUSTOMER \_\_\_\_\_  
ADDRESS \_\_\_\_\_ DATE 8/16  
WORK LOCATION (NAME) The Galaxy to haws Flat Line API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact	
	Date:
<u>Jane Kennedy</u>	Signature
Disposal Site	
	Date:
<u>Sundance</u>	Signature
	Yardage: <u>20</u>
	Truck #: <u>21</u>
	Driver's Signature <u>[Signature]</u>

Manifest Number: **0367**



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER FOH CUSTOMER \_\_\_\_\_  
ADDRESS The Galaxy to Henry Flat line DATE 8-16-19  
WORK LOCATION(NAME) \_\_\_\_\_ API # \_\_\_\_\_  
CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY leu STATE NM

Facility Contact	
<u>James Kennedy</u>	Date: _____
<u>432) 484-9146</u>	Signature _____
Disposal Site	
<u>Sundance</u>	Date: _____
<u>by</u>	Signature _____
	Yardage: <u>20</u>
	Truck #: <u>31</u>
	Driver's Signature _____
Manifest Number: <u>0802</u>	

Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**  
6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER EOG CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8-16-19

WORK LOCATION (NAME) The Galaxy to hearns flat line API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact \_\_\_\_\_

James Kennedy

Date: \_\_\_\_\_  
Signature \_\_\_\_\_

Disposal Site \_\_\_\_\_

Sun Dance

Date: \_\_\_\_\_  
Signature \_\_\_\_\_  
Yardage: 20  
Truck #: 039  
Ruben Driver's Signature Homaley

Manifest Number: 0276



Dirt Excavation • Environmental • Production Services

**SDR Enterprises, LLC.**

6222 S. Bronco Dr.  
Hobbs, NM 88240  
Office: 575-393-8420



**MANIFEST**

Lic. #386707

CUSTOMER Ecog CUSTOMER \_\_\_\_\_

ADDRESS \_\_\_\_\_ DATE 8/9/19

WORK LOCATION(NAME) The Galaxy to Leans Lay Flat API # \_\_\_\_\_

CITY (IF APPLICABLE) \_\_\_\_\_ COUNTY Lea STATE NM

Facility Contact \_\_\_\_\_

James Kandy \_\_\_\_\_  
Date: \_\_\_\_\_  
Signature \_\_\_\_\_

Disposal Site \_\_\_\_\_

Sundance \_\_\_\_\_  
Date: \_\_\_\_\_  
Signature \_\_\_\_\_  
Yardage: 70  
Truck #: 21  
Driver's Signature \_\_\_\_\_

Manifest Number: 0363



**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 225570

CONDITIONS

Operator: EOG RESOURCES INC P.O. Box 2267 Midland, TX 79702	OGRID: 7377
	Action Number: 225570
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	6/23/2023