



October 15, 2018
Cardno 01361204.Q183

Cardno

20505 Crescent Bay Dr.
Lake Forest, CA 92630
USA

Phone: +1 949 457 8950
Fax: +1 949 457 8956

www.cardno.com

Mr. Bradford Billings
State of New Mexico
Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

SUBJECT **First through Third Quarter 2018
Semi-Annual Groundwater Monitoring Report**
Gladiola Station
Lea County, New Mexico
OCD No. AP038

Mr. Billings:

At the request of ExxonMobil Environmental Services Company (EMES) on behalf of ExxonMobil US Production Company, Cardno is submitting the *First through Third Quarter 2018 Semi-Annual Groundwater Monitoring Report* for the subject site. The format used for the report consolidates groundwater sampling (where applicable) and consultant progress updates for EMES into one summary report.

Please call the undersigned at 949 457 8941 if you have questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "D. M. Purdy", is written over a light blue horizontal line.

David M. Purdy
Senior Project Manager
for Cardno
Direct Line 949 457 8941
Email: dave.purdy@cardno.com

cc: Ms. Marla D. Madden, EMES

First through Third Quarter 2018 Semi-Annual Groundwater Monitoring Report

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Prepared for
ExxonMobil Environmental Services Company

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Senior Project Manager
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Direct Line 949 457 8941
Email: dave.purdy@cardno.com

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1 Introduction

At the request of ExxonMobil Environmental Services Company (EMES), on behalf ExxonMobil US Production Company (ExxonMobil), Cardno prepared this semi-annual groundwater monitoring report for the site. The event included gauging the site wells, sampling the groundwater in site wells without NAPL, and conducting a NAPL pumping test.

2 Site Description

Gladiola Station is located in northeastern Lea County, New Mexico (Plate 1). The site is located at latitude 33.300745 degrees (°) and longitude -103.111117° and consists of 0.54 acre of land (Plate 2). The site was operated as a crude oil pipeline pumping station under ExxonMobil Pipeline Company until it was purchased by Trojan Pipeline L.P. in February 2004. Trojan changed its name to Centurion Pipeline L.P. (Centurion) in July 2004, and the site is currently operated by Centurion (AECOM, 2014a).

3 Geology and Hydrogeology

The site is located in northeastern Lea County, New Mexico, within the Llano Estacado (staked plains) physiographic province. Surface soils at the site are Quaternary windblown (eolian) sediments comprised of sands, silts and clays. This sediment can accumulate to a thickness of 20 feet in this portion of Lea County. The Quaternary sediment unconformably overlies the Tertiary Ogallala formation (AECOM, 2014a).

The Ogallala formation is comprised of variably cemented calcic sands, silts, caliche, gravel and some clays, and ranges in thickness from 50 to 300 feet. Groundwater in northern Lea County is primarily produced from the Ogallala formation. The saturated thickness ranges from 25 to 200 feet, with the depth to groundwater ranging from less than 30 to approximately 260 feet. The Ogallala formation unconformably overlies the Triassic Dockum group. The Dockum group consists of red shale and sandstone and is commonly referred to as red beds. The red beds can exceed 1,000 feet in thickness in this region and may produce small amounts of water at the bottom of the formation. Water wells in the vicinity of the site have a total depth of approximately 100 feet bgs, with depth to groundwater ranging from 35 to 70 feet bgs (AECOM, 2014a).

The surface soils encountered at the site are silty clays approximately 2 to 3 feet thick. This surface soil is consistent with the surface soil description (Quaternary sediment) for this physiographic province. The next three soil types encountered at the site are consistent with the description of the Ogallala formation (caliche, limestone and silty sands). The Dockum group was not encountered at the site (AECOM, 2014a).

The first occurrence of groundwater encountered at the site is found within the Ogallala formation and would likely be classified as the Ogallala Aquifer. The characteristics of the Ogallala Aquifer as described in the scientific literature match the characteristics of subsurface conditions beneath the site (produces small amounts of good-quality water). The depth to groundwater beneath the site has ranged historically from approximately 29 to 43 feet bgs (AECOM, 2014a).

4 Regulatory Framework and Site Classification

The New Mexico Oil Conservation Division (NMOCD) has regulatory jurisdiction over oil and gas production operations including crude-oil pipeline releases and closure activities in the State of New Mexico. This

investigation was conducted in accordance with a "revised Stage 1 Abatement Plan," submitted to the NMOCD on March 2, 2006. The NMOCD requires that soil affected by a crude oil release be remediated in such a manner that the potential for future effects to groundwater or the environment are minimized. The NMOCD hydrocarbon recommended remediation action levels (RRALs) for soil are determined by ranking criteria on a site-by-site basis, outlined in the NMOCD *Guidelines for Remediation of Spills, Leaks, and Releases*, dated August 13, 1993 (NMOCD, 1993). The ranking criteria are based on three site characteristics: depth to groundwater, wellhead protection and distance to surface water (AECOM, 2014a).

The NMOCD guidelines require groundwater to be analyzed for potential constituents of concern as defined by New Mexico Water Quality Control Commission (NMWQCC) regulatory limits. Human health standards for groundwater with a total dissolved solids (TDS) concentration of less than 10,000 mg/L can be found in New Mexico Administrative Code (NMAC) 20.6.2.3103, Sections A and B (AECOM, 2014a).

A water well search was conducted on May 28, 2008. According to the New Mexico Office of the State Engineer Water Administration Technical Engineering Resource System database, 18 wells are located within approximately 1 mile of the site. Three of those wells are within 2,000 feet of the site. Two were natural resource exploratory wells (likely petroleum exploration), and one was installed as a livestock watering well. According to the Water Administration Technical Engineering Resource System database, no wells are located within 1,000 feet of the site (AECOM, 2014a).

On March 13, 2009 and April 15, 2009, Kleinfelder West, Inc. (Kleinfelder) contacted an adjacent property owner, Mr. Tommy Burrus, to obtain information regarding water well locations and usage (AECOM, 2014a). According to Mr. Burrus, water supply wells are located as indicated in the following table.

Location	Usage	Owner
Approximately 0.5 mile northeast	Livestock watering well	Tommy Burrus
Between approximately 0.5 - 0.75 mile southeast of the site	Livestock watering well	Tommy Burrus
Approximately 0.4 mile east of the site	Domestic well at an abandoned ranch (no longer in use)	Tommy Burrus
Between approximately 0.5 and 0.75 mile northwest of the site	Livestock watering well	Clinton Houston

Data collected during groundwater monitoring and sampling events indicates that the historic DTW at the site has ranged from approximately 29 to 43 feet bgs. The site is not within 1,000 feet of a wellhead protection area, and surface water is more than 1,000 feet from the site, giving the site a ranking criteria score of 20 as summarized in the following table (AECOM, 2014a).

Characterization	Selection	Score
Depth to Groundwater	Less than 50 feet	20
Wellhead Protection Area	Greater than 1,000 feet	0
Distance to Surface Water	Greater than 1,000 feet	0
Total Score	NA	20

Based on a total score of 20, the following soil hydrocarbon RRALs apply to this site:

Constituent of Concern	RRALs (mg/kg)
Benzene	10
Total BTEX	50
TPH	100

Groundwater samples collected as part of assessment activities were evaluated using NMWQCC regulatory limits for the analytical parameters listed in the following table.

Constituent of Concern	Concentration (mg/L)
Benzene	0.01
Toluene	0.75
Ethylbenzene	0.75
Total Xylenes	0.62
Benzo(a)pyrene	0.0007
Total Naphthalene ¹	0.03
Arsenic	0.1
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.05
Silver	0.05
Chloride	250.0
Sulfate	600.0
TDS	1,000.0

¹Total Naphthalene = naphthalene + 1-methylnaphthalene + 2-methylnaphthalene

5 Previous Work

Soil and groundwater investigations have been conducted at the site since 2002. Previous work has included the drilling of soil borings, installation of wells, soil excavation, and NAPL bailing (Plate 2). For detailed information regarding these investigations, refer to the documents listed in the reference section. Cumulative groundwater analytical results are summarized in Tables 1 through 7.

5.1 Pumping Station Activities

November 18, 2002. A crude oil release of approximately 15 barrels occurred as a result of a leak from the former western sump overflow/bleeder valve, located to the northeast of well MW-1. Approximately 5 barrels of crude oil were recovered from the release (ExxonMobil, 2002).

May 21, 2007. Centurion reported a crude oil release resulting from a strainer valve failure, which caused the eastern sump, located to the north of well MW-2, to overfill (AECOM, 2014a).

March 2009. In March 2009, NAPL was observed in off-site groundwater monitoring well MW-15 at a thickness of 0.16 foot. On October 11, 2011, NAPL thickness had increased in well MW-15 to 2.24 feet. In addition, NAPL was observed in well MW-13, located northwest of MW-15, at a thickness of 0.95 foot. By October 2012, NAPL thickness had increased in well MW-15 to 3.35 feet and was first observed in off-site groundwater monitoring well MW-24 at a thickness of 4.35 feet. Based on the levels of NAPL in wells MW-15 and MW-24, ExxonMobil theorized that observation of NAPL in wells MW-13, MW-15, and MW-24 could be indicative of a third release of crude oil.

5.2 Site Assessment Activities

2004. BNC Environmental Services, Inc. conducted soil and groundwater activities, which included the installation of monitoring wells MW-1 through MW-3. NAPL was encountered in the wells. A water well search was also conducted, which did not identify water wells located on or immediately adjacent to the site (BNC, 2004).

2006. Conestoga-Rovers & Associates (CRA) advanced soil borings SB-9 and SB-11, installed groundwater monitoring wells MW-4 through MW-10, and conducted a site-wide groundwater monitoring and sampling event at the site. NAPL was encountered in wells MW-1, MW-2, and MW-3 (AECOM, 2014a).

April 2008. Kleinfelder oversaw the installation of monitoring wells MW-11 through MW-16 (Kleinfelder, 2008).

August 2009. Kleinfelder oversaw the installation of monitoring wells MW-17 through MW-21 (AECOM, 2014a).

October 26-28, 2011. Groundwater & Environmental Services, Inc. (GES) advanced soil borings SB-1 through SB-7 at the site and installed temporary groundwater monitoring wells in the borings. GES then gauged and sampled the temporary monitoring wells. Measurable NAPL was not encountered in the wells (AECOM, 2014a).

December 13-15, 2011. GES installed permanent monitoring wells MW-23 through MW-26 (AECOM, 2014a).

June 18-26, 2018. Cardno oversaw the installation of monitoring wells MW27 through MW32. Details of the well installations will be reported under separate cover.

5.3 Remediation Activities

August 2003. E. D. Walton conducted initial remedial excavation activities and B&H Maintenance and Construction conducted a soil boring investigation (B&H, 2003).

May-June 2007. Soil remediation activities, including excavation, were conducted at the site (AECOM, 2014a).

April 2, 2009. NOVA Safety and Environment, on behalf of Centurion, recommended to the NMOCD no further action for the May 2007 release (AECOM, 2014a).

April 28-29, 2016. Cardno conducted a NAPL baildown test on wells MW-13, MW-14, and MW-24. Cardno also bailed NAPL from wells MW-4, MW-5, MW-12, MW-15, MW-16, MW-18, MW-20, and MW-25 using disposable Teflon® bailers. Approximately 6 gallons of NAPL were removed. Samples of the NAPL from wells MW-13, MW-14, and MW-24 were collected for laboratory analysis (Cardno, 2016b).

October 26, 2016. Cardno conducted a NAPL pumping test to assess whether sustained flow of NAPL is possible by pumping. To begin the test, Cardno adjusted the pump to a rate of 0.1 gpm to conduct a step test to gradually increase the flow rate and determine the appropriate flow rate for a constant rate pumping test; however, Cardno was not able to sustain the desired flow rates during the step test and the constant rate test, therefore, was not performed. Approximately 100 gallons of LNAPL mixed with water was removed (Cardno, 2017a).

May 24-25, 2017. Cardno conducted a NAPL recovery test using a Xitech Instruments, Inc. ADJ210 High Performance Smart Skimmer® pump equipped with an electronic controller to assess whether sustained flow of NAPL is possible by pumping. During the test, approximately 10 to 15 gallons of NAPL were removed over a 24 hour period (Cardno, 2017b).

5.4 Groundwater Monitoring Activities

2006. CRA conducted site-wide groundwater monitoring and sampling activities. NAPL was encountered in wells MW-1 through MW-3 (AECOM, 2014a).

April 2008–February 2009. Kleinfelder conducted groundwater monitoring activities at the site. The groundwater monitoring data indicated that hydrocarbons related to the Centurion May 2007 release were still present on site (AECOM, 2014a).

October 12-13, 2011. GES performed groundwater monitoring and sampling activities for wells MW-1 through MW-22. Monitoring wells with NAPL were gauged and bailed (AECOM, 2014a).

October 28, 2011. GES gauged and sampled temporary monitoring wells SB-1 through SB-7. No measureable NAPL was encountered in the wells (AECOM, 2014a).

February 22, 2012. GES performed groundwater monitoring and sampling activities for wells MW-1 through MW-26. Monitoring wells with NAPL were gauged and bailed (AECOM, 2014a).

July 17, 2012. GES performed groundwater monitoring and sampling activities at the site. Monitoring wells with NAPL were gauged and bailed. NAPL samples from wells MW-2 and MW-13 were collected for fingerprint analysis. Borbas Surveying and Mapping LLC surveyed the 26 monitoring wells and select features on the site (AECOM, 2014a).

October 3, 2012. GES performed groundwater monitoring and sampling activities at the site. Monitoring wells with NAPL were gauged and bailed. NAPL samples were collected from wells MW-2, MW-13, MW-18, and MW-26 for fingerprint analysis (AECOM, 2014a).

May 13-16, 2013. AECOM conducted a groundwater monitoring and sampling event at the site, including the removal of bailed NAPL. Approximately 17 gallons of NAPL were recovered from affected monitoring wells. Monitoring well MW-8 was not found and is presumed to be destroyed. Large pieces of concrete were found in the vicinity of the well (AECOM, 2014a).

January 27-29, 2014. AECOM conducted a groundwater monitoring and sampling event at the site, including the removal of bailed product. Approximately 20 gallons of NAPL were recovered from affected monitoring wells (AECOM, 2014a).

June 16-19, 2014. AECOM conducted a groundwater monitoring and sampling event at the site, including the removal of bailed NAPL. Approximately 25 gallons of NAPL were recovered from affected monitoring wells. Monitoring well MW-2 was found damaged and could not be gauged or sampled (AECOM, 2014a).

November 17-19, 2014. AECOM conducted a groundwater monitoring and sampling event at the site, including the removal of bailed NAPL. Approximately 25 gallons of NAPL were recovered from affected monitoring wells (AECOM, 2014b).

December 7-9, 2015. Cardno conducted a groundwater monitoring and sampling event at the site, including the removal of bailed NAPL. Approximately 30 gallons of NAPL were removed from affected monitoring wells (Cardno, 2016a).

April 26-27, 2016. Cardno conducted a groundwater monitoring and sampling event at the site (Cardno, 2016b).

April 28-29, 2016. Cardno conducted a NAPL baildown test on wells MW-13, MW-14, and MW-24. Cardno also bailed NAPL from wells MW-4, MW-5, MW-12, MW-15, MW-16, MW-18, MW-20, and MW-25 using disposable Teflon® bailers. Approximately 6 gallons of NAPL were removed. Samples of the NAPL from wells MW-13, MW-14, and MW-24 were collected for laboratory analysis (Cardno, 2016b).

October 24-26, 2016. Cardno conducted a groundwater monitoring and sampling event (Cardno, 2017a).

May 24-25, 2017. Cardno conducted a groundwater monitoring and sampling event at the site (Cardno, 2017b).

November 28-29, 2017. Cardno conducted a groundwater monitoring and sampling event at the site bailed NAPL from wells MW5 (1 gallon), MW14 (3 gallons), MW24 (2 gallons), and MW25 (2 gallons). Approximately 30 gallons of NAPL were removed from affected monitoring wells (Cardno, 2018).

November 30, 2017. Cardno collected additional DTW and depth to product (DTP) measurements from select bailed wells (Cardno, 2018).

6 Field Activities

Field data sheets are included in Appendix A. The laboratory analytical report is included in Appendix B.

6.1 Monitoring Well Gauging

On July 17, 2018, monitoring wells MW-1 through MW-26, and newly-installed groundwater monitoring wells B1/MW27 through B6/MW32, were gauged with the exception of wells MW-2 and MW-8. Monitoring well MW-2 is damaged and cannot be gauged or sampled. Monitoring well MW-8 was not located and is presumed to have been destroyed in 2013.

At the beginning of the groundwater monitoring event, the monitoring well boxes were opened and the locking well caps removed from the wells. The liquid level within each well was allowed to equilibrate to atmospheric pressure. The water levels were measured in all wells prior to sampling using an electronic oil/water interface probe capable of detecting groundwater elevations to the nearest 0.01 foot.

In wells without NAPL or a sheen, the depth to groundwater was measured to the nearest 0.01 foot with an electronic oil/water interface probe. Groundwater elevations are calculated by subtracting the depth to groundwater from the surveyed TOC.

In wells with NAPL, the depth of the top and bottom of NAPL was measured using an oil/water interface probe. The water levels were then corrected for density effects to accurately determine the elevation of the water table. Wells containing NAPL are not purged or sampled.

After measuring the static groundwater levels, select monitoring wells were purged using low-flow sampling techniques. Samples were collected once field parameters stabilized. Submersible pumps were utilized for purging the monitoring wells and the flow rate was adjusted to minimize drawdown. Water quality measurements including temperature, pH, conductivity, dissolved oxygen and ORP were recorded via the use of a flow-through cell and a YSI multi-parameter meter. The sample intake was positioned at approximately the middle of the well screen.

6.2 Monitoring Well Sampling

On July 18 to 20, 2018, groundwater samples were collected from the monitoring wells without NAPL.

The wells were sampled using low-flow sampling techniques in general accordance with the EPA guidelines described in the EPA document titled "Standard Operating Procedure for Low-Stress (Low Flow)/Minimal Drawdown Ground-Water Sample Collection" (www.epa.gov/Region09/qa/pdfs/finalsops1217.pdf).

After purging, groundwater samples were collected through a bladder pump directly into laboratory-provided containers. Depending on the required analysis, each sample container was preserved with hydrochloric acid, nitric acid, etc., or it was preservative-free. The samples were immediately placed on ice in laboratory-supplied containers and subsequently shipped to a certified environmental laboratory using COC protocol.

QA/QC samples were also submitted including a field blank and an equipment blank. The field blank was prepared by placing distilled water into the laboratory supplied sample containers while in the field. The equipment blank was prepared by pouring distilled water over or through decontaminated field sampling equipment prior to the collection of samples.

The samples were analyzed for VOCs by EPA Method 8260B, PAHs by EPA Method 8270C, RCRA metals by EPA Method 6010B, mercury by EPA Method 7470A, chloride by Standard Method 4500 Cl-E, sulfate by EPA Method D516-90, total alkalinity by SM 2320B, and TDS by SM 2540C.

6.3 NAPL Bailing

No NAPL bailing was conducted during this groundwater monitoring and sampling event.

6.4 Waste Management

Decontamination/purge water and NAPL generated during the sampling and NAPL recovery event were temporarily stored in DOT-approved, sealed 55-gallon drums. Waste disposal documentation will be included in the next groundwater monitoring report.

7 Results

Measurable NAPL was encountered in monitoring wells MW-1, MW-3, MW-4, MW-5, MW-9, MW-12 through MW-16, MW-18, MW-20, MW-21, MW-23, MW-24, and MW-25. NAPL thickness ranged from 0.07 foot (MW-23) to 1.31 feet (MW-24). It should be noted that NAPL was not observed in newly-installed groundwater monitoring wells B1/MW27 through B6/MW32.

Measured groundwater levels in the wells ranged from 35.80 feet below TOC (well MW-3) to 41.28 feet below TOC (MW32). The apparent groundwater flow direction is northeast. The groundwater surface elevations and NAPL thicknesses for the monitoring wells are summarized in Table 1. The groundwater surface elevations were used to construct a potentiometric surface map (Plate 3), illustrating the estimated water table contours and direction of groundwater flow.

Groundwater analytical results were compared to NMWQCC standards as shown in Tables 1 through 7.

Concentrations reported in the sampled wells did not exceed NMWQCC standards with the following exceptions:

- **Benzene:** MW-17 and MW26.
- **Total Naphthalene:** MW-17.
- **Chloride:** MW27
- **Selenium:** MW27.
- **TDS:** MW-10, MW-11, MW-17, and MW28.

A map showing the extent of NAPL and groundwater concentrations for BTEX and total naphthalene are presented on Plate 4.

8 Conclusions and Recommendations

Concentrations and NAPL measurements decreased or remained stable. The lateral assessment of NAPL in groundwater appears to be delineated with no NAPL or sheen observed in newly installed groundwater monitoring wells MW27 through MW32 this quarter. The groundwater flow direction was consistent with historical results. Cardno recommends conducting a meeting with Centurion Pipeline to discuss a remediation plan for the removal and lateral control of NAPL in groundwater. In addition, Cardno recommends continued semi-annual groundwater monitoring at the site.

9 Contact Information

The responsible party contact is Ms. Marla D. Madden, EMES, 18685 Main Street, Suite 101 PMB 601, Huntington Beach, California, 92648-1719.

The consultant contact is Mr. David M. Purdy, Cardno, 20505 Crescent Bay Drive, Lake Forest, California, 92630.

The agency contact is Mr. Bradford Billings, NMOCD, 1220 South Saint Francis Drive, Santa Fe, New Mexico, 87505.

10 Limitations

For documents cited that were not generated by Cardno, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This document and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services in New Mexico at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

11 References

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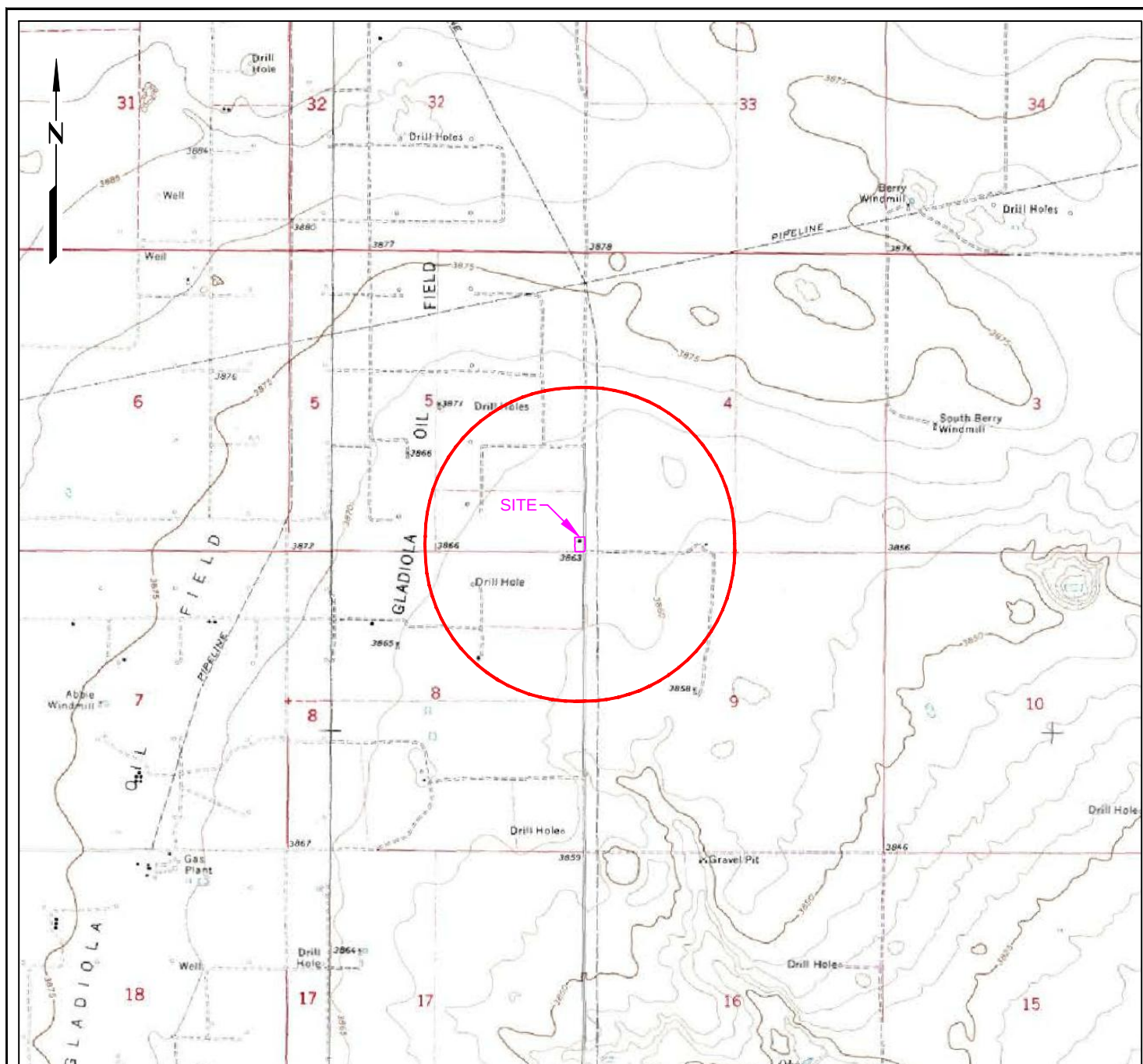
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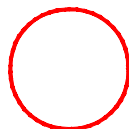
12 Acronym List

µg/L	Micrograms per liter	NAPL	Non-aqueous phase liquid
µg/m ³	Micrograms per cubic meter	NEPA	National Environmental Policy Act
µs	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acfm	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
AST	Aboveground storage tank	OSHA	Occupational Safety and Health Administration
bgs	Below ground surface	OVA	Organic vapor analyzer
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	P&ID	Process and Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic (or polyaromatic) hydrocarbon
COC	Chain-of-Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethene or perchloroethylene
DIPE	Di-isopropyl ether	PID	Photo-ionization detector
DO	Dissolved oxygen	PLC	Programmable logic control
DOT	Department of Transportation	POTW	Publicly-owned treatment works
DPE	Dual-phase extraction	ppmv	Parts per million by volume
DTW	Depth to water	PQL	Practical quantitation limit
EDB	1,2-dibromoethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HIT	High-intensity targeted	SVOC	Semi-volatile organic compound
HVOC	Halogenated volatile organic compound	TAME	Tertiary amyl methyl ether
J	Estimated value between MDL and PQL (RL)	TBA	Tertiary butyl alcohol
LEL	Lower explosive limit	TCE	Trichloroethene
LPC	Liquid-phase carbon	TOC	Top of well casing elevation; datum is msl
LRP	Liquid-ring pump	TOG	Total oil and grease
LUFT	Leaking underground fuel tank	TPH	Total petroleum hydrocarbons
LUST	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHS	Total petroleum hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
mg/m ³	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon



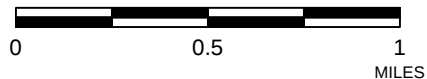
FN 3612.TOPO02

EXPLANATION



1/2-mile distance from
property border

APPROXIMATE SCALE



SOURCE:
Modified from a map
provided by
MapPass



SITE LOCATION MAP

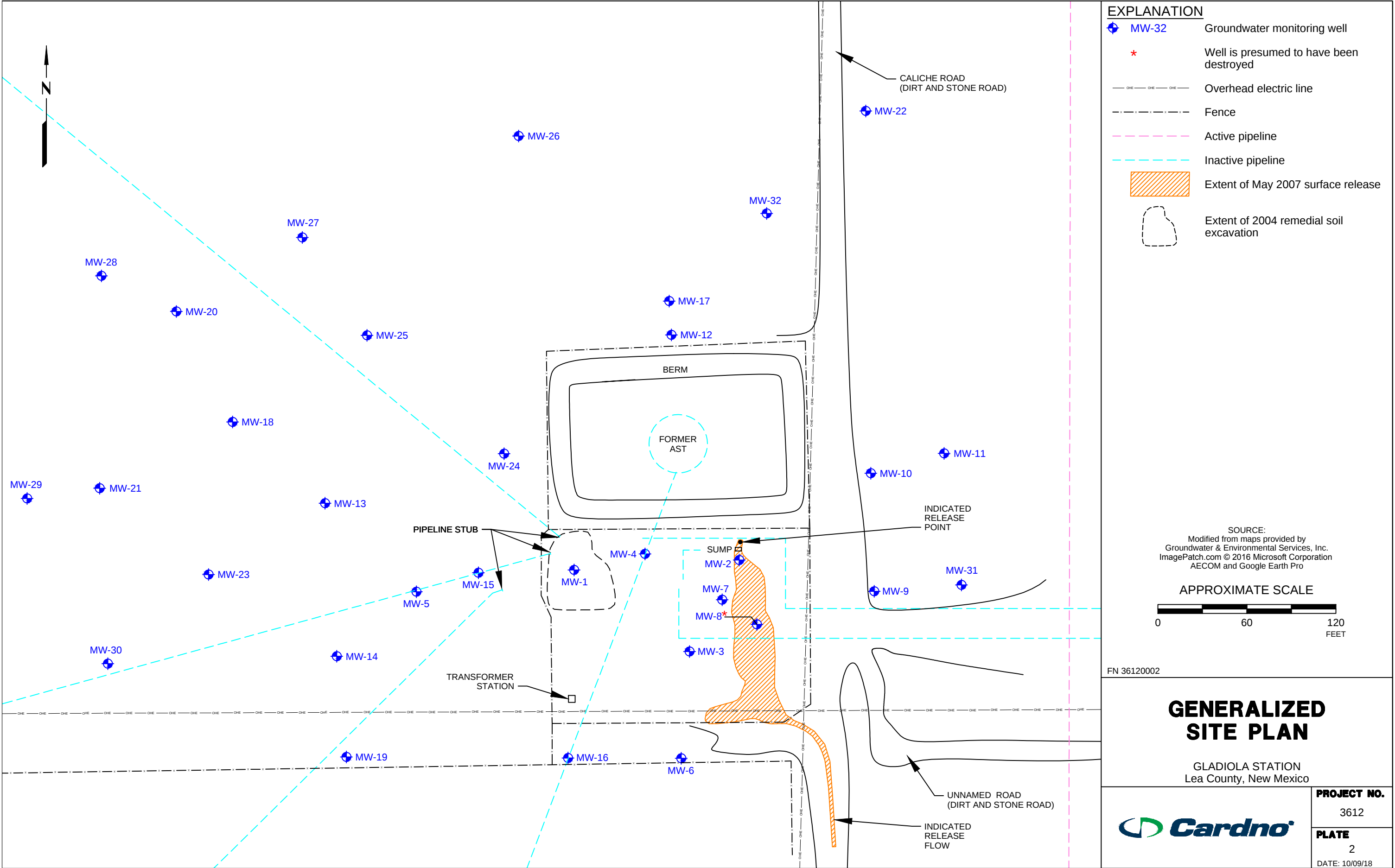
GLADIOLA STATION
Lea County, New Mexico

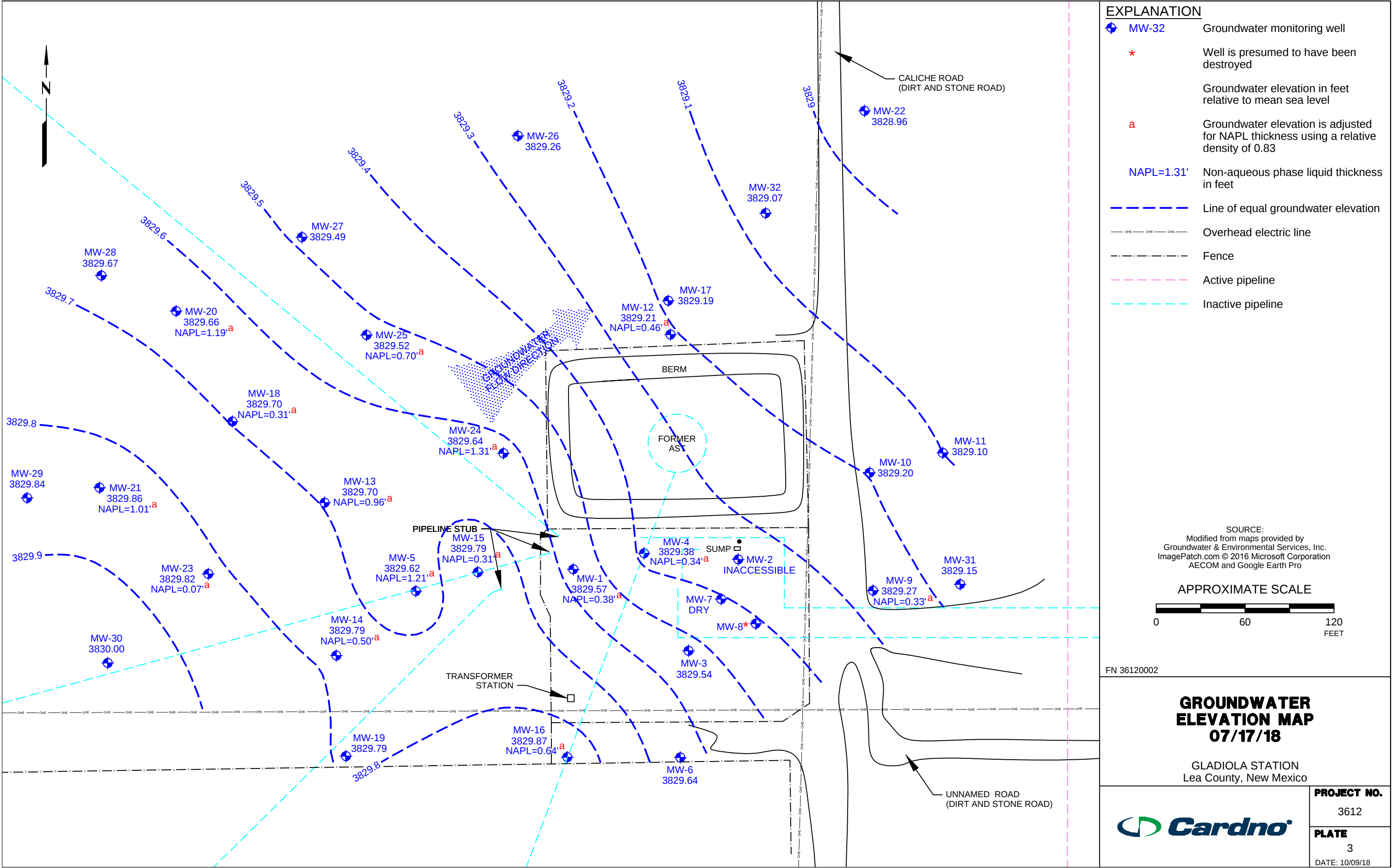
PROJECT NO.

3612

PLATE

1





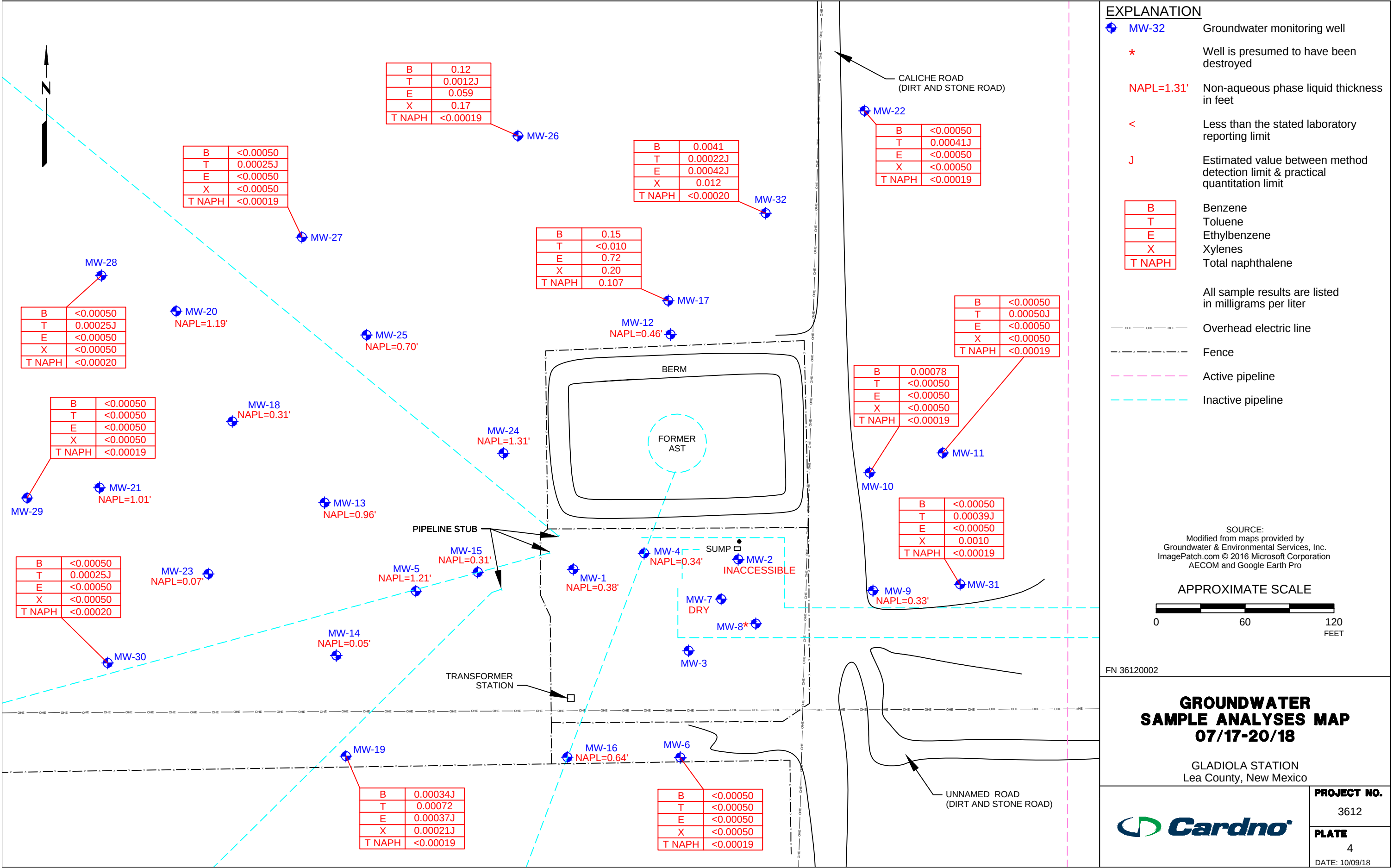


TABLE 1
WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
Lea County, New Mexico
Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-1	Well Screen Interval (feet): 22.71-42.71							
07/17/18	3866.77	37.52	3829.57	0.38				
Field Point MW-3	Well Screen Interval (feet): 24.20-44.20							
07/17/18	3865.34	35.80	3829.54	No				
Field Point MW-4	Well Screen Interval (feet): 23.97-38.97							
07/17/18	3866.32	37.22	3829.38	0.34				
Field Point MW-5	Well Screen Interval (feet): 27.19-47.19							
07/17/18	3868.65	40.03	3829.62	1.21				
Field Point MW-6	Well Screen Interval (feet): 27.05-42.05							
07/17/18	3868.66	39.02	3829.64	No				
07/20/18	3868.66			No	<0.00050	<0.00050	<0.00050	<0.00050
Field Point MW-8	Well Screen Interval (feet): 23.05-38.05							
07/17/18	NE			Unable to locate - Presumed destroyed.				
Field Point MW-9	Well Screen Interval (feet): 27.64-42.64							
07/17/18	3869.90	40.90	3829.27	0.33				
Field Point MW-10	Well Screen Interval (feet): 28.08-43.08							
07/17/18	3870.47	41.27	3829.20	No				
07/20/18	3870.47	41.30	3829.17	No	0.00078	<0.00050	<0.00050	<0.00050
Field Point MW-11	Well Screen Interval (feet): 29.00-44.00							
07/17/18	3869.68	40.58	3829.10	No				
07/18/18	3869.68	40.58	3829.10	No	<0.00050	0.00050 J	<0.00050	<0.00050
Field Point MW-12	Well Screen Interval (feet): 30.00-45.00							
07/17/18	3869.40	40.57	3829.21	0.46				
Field Point MW-13	Well Screen Interval (feet): 30.00-45.00							
07/17/18	3868.76	39.86	3829.70	0.96				
Field Point MW-14	Well Screen Interval (feet): 27.00-42.00							
07/17/18	3868.62	39.25	3829.79	0.50				
Field Point MW-15	Well Screen Interval (feet): 29.00-44.00							
07/17/18	3868.86	39.33	3829.79	0.31				
Field Point MW-16	Well Screen Interval (feet): 26.50-41.50							
07/17/18	3868.68	39.34	3829.87	0.64				
Field Point MW-17	Well Screen Interval (feet): 29.50-44.50							
07/17/18	3869.27	40.08	3829.19	No				
07/18/18	3869.27			No	0.15	<0.010	0.72	0.20
Field Point MW-18	Well Screen Interval (feet): 27.00-42.00							
07/17/18	3868.94	39.50	3829.70	0.31				

TABLE 1
WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
Lea County, New Mexico
Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-19	Well Screen Interval (feet): 27.00-42.00							
07/17/18	3868.90	39.11	3829.79	No				
07/18/18	3868.90			No	0.00034 J	0.00072	0.00037 J	0.00021 J
Field Point MW-20	Well Screen Interval (feet): 29.50-44.50							
07/17/18	3869.15	40.48	3829.66	1.19				
Field Point MW-21	Well Screen Interval (feet): 29.50-44.50							
07/17/18	3869.07	40.05	3829.86	1.01				
Field Point MW-22	Well Screen Interval (feet): 30.00-45.00							
07/17/18	3869.86	40.90	3828.96	No				
07/18/18	3869.86	40.90	3828.96	No	<0.00050	0.00041 J	<0.00050	<0.00050
Field Point MW-23	Well Screen Interval (feet): 31.00-46.00							
07/17/18	3869.22	39.46	3829.82	0.07				
Field Point MW-24	Well Screen Interval (feet): 28.00-43.00							
07/17/18	3868.04	39.49	3829.64	1.31				
Field Point MW-25	Well Screen Interval (feet): 28.00-43.00							
07/17/18	3869.14	40.20	3829.52	0.70				
Field Point MW-26	Well Screen Interval (feet): 30.00-45.00							
07/17/18	3869.15	39.89	3829.26	No				
07/18/18	3869.15			No	0.12	0.0012 J	0.059	0.17
Field Point MW-27	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.12	39.63	3829.49	No				
07/19/18	3869.12	39.60	3829.52	No	<0.00050	0.00025 J	<0.00050	<0.00050
Field Point MW-28	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.32	39.65	3829.67	No				
07/19/18	3869.32			No	<0.00050	0.00025 J	<0.00050	<0.00050
Field Point MW-29	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.36	39.52	3829.84	No				
07/19/18	3869.36	39.47	3829.89	No	<0.00050	<0.00050	<0.00050	<0.00050
Field Point MW-30	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.10	39.10	3830.00	No				
07/19/18	3869.10			No	<0.00050	0.00025 J	<0.00050	<0.00050
Field Point MW-31	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.05	39.90	3829.15	No				
07/19/18	3869.05			No	<0.00050	0.00039 J	<0.00050	0.0010
Field Point MW-32	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3870.35	41.28	3829.07	No				
07/19/18	3870.35			No	0.0041	0.00022 J	0.00042 J	0.012

TABLE 1
WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
Lea County, New Mexico
Cardno 3612

Notes: Data collected prior to December 8, 2015 provided by AECOM.

ELEV = Elevation.

GW = Groundwater.

NAPL = Non-aqueous phase liquid.

Groundwater elevations are adjusted for NAPL thickness using a relative density of 0.83.

NMED WQCC HHS = New Mexico Environmental Department Water Quality Control Commission Human Health Standard for groundwater with 10,000 mg/l TDS or less.

Bolded values equal or exceed applicable regulatory limits.

Naphthalene is analyzed by EPA Method 8270C unless otherwise noted.

Total naphthalenes are the sum of 1- and 2-methylnaphthalene and naphthalene.

TDS = Total dissolved solids.

mg/l = Milligrams per liter.

BDL = Below laboratory detection limits.

< = Not detected at or above stated laboratory reporting limit.

A-01 = Could not obtain constant weight.

D = Duplicate sample.

J = Estimated value between method detection limit and practical quantitation limit.

R1 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the higher value was reported.

R10 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported due to apparent chromatographic problems.

R12 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported.

X = Pre-purge/no-purge sample.

(a) = Analyzed by EPA Method 8310.

(b) = Analyzed by EPA Method 8260B.

(c) = Analyzed method unknown.

(d) = Analyzed to determine the presense of NAPL.

TABLE 2
GROUNDWATER ANALYTICAL RESULTS FOR SVOCs
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-6 07/20/18	Well Screen Interval (feet): 27.05-42.05			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-10 07/20/18	Well Screen Interval (feet): 28.08-43.08			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00017 J	<0.00019
Field Point MW-11 07/18/18	Well Screen Interval (feet): 29.00-44.00			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-17 07/18/18	Well Screen Interval (feet): 29.50-44.50			0.000077 J	0.00011 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0015	<0.00019
Field Point MW-19 07/18/18	Well Screen Interval (feet): 27.00-42.00			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-22 07/18/18	Well Screen Interval (feet): 30.00-45.00			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-26 07/18/18	Well Screen Interval (feet): 30.00-45.00			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-27 07/19/18	Well Screen Interval (feet): 35.00-50.00			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-28 07/19/18	Well Screen Interval (feet): 35.00-50.00			<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Field Point MW-29 07/19/18	Well Screen Interval (feet): 35.00-50.00			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-30 07/19/18	Well Screen Interval (feet): 35.00-50.00			<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Field Point MW-31 07/19/18	Well Screen Interval (feet): 35.00-50.00			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00017 J	<0.00019
Field Point MW-32 07/19/18	Well Screen Interval (feet): 35.00-50.00			<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

TABLE 2
GROUNDWATER ANALYTICAL RESULTS FOR SVOCs
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-6	Well Screen Interval (feet): 27.05-42.05					
07/20/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-10	Well Screen Interval (feet): 28.08-43.08					
07/20/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-11	Well Screen Interval (feet): 29.00-44.00					
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-17	Well Screen Interval (feet): 29.50-44.50					
07/18/18	0.00073	<0.00019	0.053	0.026	0.028	0.107
Field Point MW-19	Well Screen Interval (feet): 27.00-42.00					
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-22	Well Screen Interval (feet): 30.00-45.00					
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-26	Well Screen Interval (feet): 30.00-45.00					
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-27	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-28	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Field Point MW-29	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-30	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Field Point MW-31	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-32	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

TABLE 2
GROUNDWATER ANALYTICAL RESULTS FOR SVOCs
Gladiola Station
Lea County, New Mexico
Cardno 3612

Notes: Data collected prior to December 8, 2015 provided by AECOM.
ELEV = Elevation.
GW = Groundwater.
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NMED WQCC HHS = New Mexico Environmental Department Water Quality Control Commission Human Health Standard for groundwater with 10,000 mg/l TDS or less.
Bolded values equal or exceed applicable regulatory limits.
Naphthalene is analyzed by EPA Method 8270C unless otherwise noted.
Total naphthalenes are the sum of 1- and 2-methylnaphthalene and naphthalene.
TDS = Total dissolved solids.
mg/l = Milligrams per liter.
BDL = Below laboratory detection limits.
< = Not detected at or above stated laboratory reporting limit.
A-01 = Could not obtain constant weight.
D = Duplicate sample.
J = Estimated value between method detection limit and practical quantitation limit.
R1 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the higher value was reported.
R10 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported due to apparent chromatographic problems.
R12 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported.
X = Pre-purge/no-purge sample.
(a) = Analyzed by EPA Method 8310.
(b) = Analyzed by EPA Method 8260B.
(c) = Analyzed method unknown.
(d) = Analyzed to determine the presense of NAPL.

TABLE 3
GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-6 07/20/18	Well Screen Interval (feet): 27.05-42.05		<0.0100	0.00674 J	0.00430 J	0.000190 B,J	0.0344	<0.00500	4.6	180	430	525
Field Point MW-10 07/20/18	Well Screen Interval (feet): 28.08-43.08		<0.0100	0.00305 J	0.00666 J	0.000779 B	0.0235	<0.00500	140	100	600	1110
Field Point MW-11 07/18/18	Well Screen Interval (feet): 29.00-44.00		<0.0100	<0.0100	<0.0100	0.000163 B,J	<0.0150	0.00260 J	170	68	440	1040
Field Point MW-17 07/18/18	Well Screen Interval (feet): 29.50-44.50		<0.0100	0.00471 J	<0.0100	0.0000984 B,J	<0.0150	<0.00500	5.6	<1.0	850	1000
Field Point MW-19 07/18/18	Well Screen Interval (feet): 27.00-42.00		<0.0100	<0.0100	<0.0100	0.000112 B,J	<0.0150	<0.00500	36	120	300	610
Field Point MW-22 07/18/18	Well Screen Interval (feet): 30.00-45.00		<0.0100	<0.0100	<0.0100	0.000161 B,J	0.0432	<0.00500	34	19	240	615
Field Point MW-26 07/18/18	Well Screen Interval (feet): 30.00-45.00		<0.0100	<0.0100	<0.0100	0.000129 B,J	0.0144 J	0.00155 J	30	170	320	720
Field Point MW-27 07/19/18	Well Screen Interval (feet): 35.00-50.00		<0.0100	<0.0100	<0.0100	0.000115 B,J	0.0519	<0.00500	280	130	170	980
Field Point MW-28 07/19/18	Well Screen Interval (feet): 35.00-50.00		<0.0100	<0.0100	<0.0100	0.000104 B,J	0.0300	0.00196 J	220	430	140	1060
Field Point MW-29 07/19/18	Well Screen Interval (feet): 35.00-50.00		<0.0100	<0.0100	<0.0100	0.000116 B,J	0.0282	0.00145 J	190	100	170	805
Field Point MW-30 07/19/18	Well Screen Interval (feet): 35.00-50.00		<0.0100	<0.0100	<0.0100	0.000102 B,J	<0.0150	<0.00500	170	100	170	725
Field Point MW-31 07/19/18	Well Screen Interval (feet): 35.00-50.00		<0.0100	<0.0100	<0.0100	0.000103 B,J	0.0202	0.00222 J	120	150	250	735
Field Point MW-32 07/19/18	Well Screen Interval (feet): 35.00-50.00		<0.0100	<0.0100	<0.0100	0.000153 B,J	0.0187	<0.00500	47	53	450	705

TABLE 3
GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
Gladiola Station
Lea County, New Mexico
Cardno 3612

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ELEV = Elevation.
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TDS = Total dissolved solids.
mg/l = Milligrams per liter.
BDL = Below laboratory detection limits.
< = Not detected at or above stated laboratory reporting limit.
A-01 = Could not obtain constant weight.
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R1 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the higher value was reported.
R10 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported due to apparent chromatographic problems.
R12 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported.
X = Pre-purge/no-purge sample.
(a) = Analyzed by EPA Method 8310.
(b) = Analyzed by EPA Method 8260B.
(c) = Analyzed method unknown.
(d) = Analyzed to determine the presense of NAPL.

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-1	Well Screen Interval (feet): 22.71-42.71							
05/17/04	3863.81	32.74	3831.07	No				
11/30/04	3863.81	30.83	3835.00	2.43				
05/05/05	3863.81	29.20	3835.25	0.77				
07/24/06	3863.81	28.71	3835.58	0.58	1.6	0.236	0.181	0.815
02/08/07	3863.81	28.92	3835.27	0.46	1.1	0.106	0.362	1.46
04/15/08	3863.81	29.45	3834.68	0.39				
09/21/08	3863.81			No				
09/26/08	3863.81	29.58	3834.51	0.34	1.03	0.00434	0.551	1.63
02/15/09	3863.81	30.50	3833.60	0.35				
05/19/09	3863.81	30.85	3833.32	0.43	1.12	0.00132	0.563	1.22
08/19/09	3865.14	31.75	3833.68	0.35	1.06	0.227	0.67	1.51
10/30/09	3865.14	31.73	3833.64	0.28	1.01	0.00225	0.774	1.63
10/12/11	3865.14	34.60	3831.00	0.55				
02/22/12	3865.14	34.85	3830.66	0.45				
07/17/12	3866.63	35.26	3831.77	0.48				
10/03/12	3866.63	35.42	3831.58	0.45				
05/14/13	3866.63	35.83	3831.12	0.39				
01/27/14	3866.63	36.83	3830.57	0.93				
06/17/14	3866.63	36.92	3830.19	0.58				
11/18/14	3866.63	36.94	3830.19	0.60				
12/07/15	3866.63	36.87	3830.11	0.42				
04/26/16	3866.63	37.20	3829.73	0.36				
10/24/16	3866.63	36.64	3830.17	0.22				
05/22/17	3866.63	37.41	3829.56	0.41				
11/28/17	3866.63	37.18	3829.67	0.27				
07/17/18	3866.77	37.52	3829.57	0.38				
Field Point MW-2	Well Screen Interval (feet): 27.59-47.59							
05/17/04	3867.89	37.04	3830.85	No				
11/30/04	3867.89	35.61	3833.88	1.93				
05/05/05	3867.89	33.36	3834.90	0.45				
07/25/06	3867.89	33.14	3834.95	0.24	0.00492	0.0142	0.142	0.166
02/08/07	3867.89	33.07	3834.92	0.12	0.0550	0.0111	0.0726	0.105
04/15/08	3867.89	38.81	3834.43	6.44				
09/22/08	3867.89			No				
09/26/08	3867.89	38.97	3833.94	6.05	2.57	2.66	0.504	1.210
02/15/09	3867.89	38.95	3833.45	5.43				
05/19/09	3867.89	38.63	3833.09	4.62	Not sampled - NAPL entered bailer during each attempt.			
08/19/09	3867.89	39.00	3832.92	4.85	2.70	2.44	0.495	1.110
10/30/09	3867.89	38.98	3832.87	4.77	3.25	<0.00100	0.381	0.675
10/12/11	3867.89	39.46	3830.82	2.88				
02/22/12	3867.89	39.73	3830.48	2.80				
07/17/12	3869.40	40.19	3831.64	2.93				
10/03/12	3869.40	40.29	3831.45	2.82				
05/14/13	3869.40	40.72	3830.96	2.75				
01/27/14	3869.40	40.11	3830.39	1.33				
06/17/14	3869.40				Inaccessible - Stick-up well casing damaged.			
12/07/15	3869.40				Inaccessible - Stick-up well casing damaged.			
04/26/16	3869.40				Inaccessible - Stick-up well casing damaged.			
10/24/16	3869.40				Inaccessible - Stick-up well casing damaged.			
05/22/17	3869.40				Inaccessible - Stick-up well casing damaged.			
11/28/17	3869.40				Inaccessible - Stick-up well casing damaged.			

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-3	Well Screen Interval (feet): 24.20-44.20							
05/17/04	3863.72	32.79	3830.93	No				
11/30/04	3863.72	30.08	3834.01	0.44				
05/05/05	3863.72	28.90	3835.02	0.24				
07/24/06	3863.72	28.87	3835.06	0.25	0.0452	0.00715	0.0974	0.015
02/08/07	3863.72	28.79	3835.02	0.11	0.586	0.00522	0.114	0.360
04/15/08	3863.72	29.42	3834.48	0.22				
09/22/08	3863.72			No				
09/26/08	3863.72	29.99	3833.90	0.20	1.55	<0.00100	0.133	0.310
02/15/09	3863.72	29.90	3833.94	0.15				
05/19/09	3863.72	30.82	3833.14	0.29	1.2	<0.00100	0.116	0.206
08/19/09	3863.72	31.15	3832.86	0.35	2.05	<0.00100	0.174	0.317
10/30/09	3863.72	31.16	3832.83	0.33	1.96	<0.00100	0.166	0.320
10/12/11	3863.72	33.10	3830.94	0.38				
02/22/12	3863.72	33.30	3830.58	0.19				
07/17/12	3865.25	33.80	3831.71	0.31				
10/03/12	3865.25	33.94	3831.51	0.24				
05/14/13	3865.25	34.31	3831.04	0.12				
01/27/14	3865.25	35.04	3830.47	0.31				
06/17/14	3865.25	35.33	3830.13	0.25				
11/18/14	3865.25	35.34	3830.02	0.13				
12/07/15	3865.25	35.39	3829.93	0.09				
04/26/16	3865.25	35.69	3829.71	0.18				
10/24/16	3865.25	35.42	3829.93	0.12				
05/22/17	3865.25	35.80	3829.52	0.09				
11/28/17	3865.25	35.70	3829.57	0.02	Insufficient water to sample.			
07/17/18	3865.34	35.80	3829.54	No				
Field Point MW-4	Well Screen Interval (feet): 23.97-38.97							
07/25/06	3864.66	29.57	3835.09	No	3.14	0.0387	0.153	0.318
02/07/07	3864.66	29.66	3835.00	No	2.78	0.0239	0.215	0.451
04/15/08	3864.66	30.21	3834.45	No	3.39	0.0151	0.337	0.662
09/21/08	3864.66			No				
09/26/08	3864.66	30.75	3833.93	0.02	2.95	0.0276	0.328	0.688
02/15/09	3864.66	31.09	3833.58	0.01				
05/19/09	3864.66	31.73	3833.10	0.20	1.93	0.00189	0.170	0.546
08/19/09	3864.66	31.82	3832.98	0.17	2.89	<0.00100	0.336	0.600
10/30/09	3864.66	31.80	3832.96	0.12	2.92	0.0011	0.347	0.619
10/12/11	3864.66	34.09	3830.91	0.41				
02/22/12	3864.66	34.58	3830.54	0.56				
07/17/12	3866.18	35.21	3831.78	0.97				
10/03/12	3866.18	36.07	3831.51	1.69				
05/14/13	3866.18	35.53	3831.22	0.69				
01/27/14	3866.18	36.77	3830.47	1.28				
06/17/14	3866.18	36.76	3830.12	0.84				
11/18/14	3866.18	36.79	3830.04	0.78				
12/07/15	3866.18	36.71	3829.99	0.63				
04/26/16	3866.18	36.78	3829.72	0.38				
10/24/16	3866.18	36.60	3829.89	0.37				
05/22/17	3866.18	37.15	3829.53	0.60				
11/28/17	3866.18	37.03	3829.59	0.53				
07/17/18	3866.32	37.22	3829.38	0.34				

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-5	Well Screen Interval (feet): 27.19-47.19							
07/20/06	3866.99	31.82	3835.17	No	6.93	0.374	0.567	1.14
02/07/07	3866.99	31.93	3835.06	No	6.91	0.297	0.905	1.74
04/15/08	3866.99	32.45	3834.54	No	5.44	0.0686	0.763	1.33
09/21/08	3866.99			No				
09/26/08	3866.99	33.07	3833.92	No	6.17	0.0979	0.736	1.220
02/06/09	3866.99	33.54	3833.45	No	5.61	0.0514	0.849	1.410
02/06/09 D	3866.99	33.54	3833.45	No	5.26	0.0438	0.835	1.320
05/19/09	3866.99	33.83	3833.16	No	5.08	0.0436	0.681	1.180
08/19/09	3866.99	34.15	3832.84	No	4.68	0.0567	0.726	0.932
08/19/09 D	3866.99	34.15	3832.84	No	4.79	0.0732	0.709	1.100
10/30/09	3866.99	34.35	3832.64	No	5.01	0.0933	0.713	1.25
10/12/11	3866.99	36.02	3830.97	No	3.5	0.00678	0.521	0.431
10/12/11 D	3866.99	36.02	3830.97	No	3.47	0.00666	0.52	0.407
02/22/12	3866.99	36.85	3830.14	No	3.75	0.00125	0.54	0.626
02/22/12 D	3866.99	36.85	3830.14	No	3.65	<0.00100	0.516	0.593
07/17/12	3868.54	36.70	3831.84	No	2.68	<0.00100	0.419	0.262
07/17/12 D	3868.54	36.70	3831.84	No	2.62	<0.00100	0.39	0.251
10/03/12	3868.54	37.54	3831.00	No	2.91	<0.00100	0.49	0.667
10/03/12 D	3868.54	37.54	3831.00	No	2.97	<0.00100	0.501	0.683
05/15/13	3868.54	37.47	3831.05	0.10				
01/28/14	3868.54	38.90	3830.47	1.00				
06/18/14	3868.54	39.13	3830.17	0.91				
11/18/14	3868.54	40.01	3829.95	1.71				
12/07/15	3868.54	41.09	3829.92	2.98				
04/26/16	3868.54	39.48	3829.76	0.84				
10/24/16	3868.54	39.59	3829.80	1.02				
05/22/17	3868.54	39.80	3829.66	1.11				
11/28/17	3868.54	40.06	3829.52	1.25				
07/17/18	3868.65	40.03	3829.62	1.21				
Field Point MW-6	Well Screen Interval (feet): 27.05-42.05							
07/21/06	3867.00	31.84	3835.16	No	0.034	0.001	0.001	0.0531
02/07/07	3867.00	31.93	3835.07	No	0.00667	<0.00100	<0.00100	0.0245
04/15/08	3867.00	32.51	3834.49	No	1.34	<0.00100	<0.00100	<0.00300
09/21/08	3867.00			No				
09/26/08	3867.00	33.08	3833.92	No	0.00261	<0.00100	<0.00100	<0.00300
02/06/09	3867.00	33.51	3833.49	No	0.00143	<0.00100	<0.00100	<0.00300
05/18/09	3867.00	33.87	3833.13	No	0.00184	<0.00100	<0.00100	<0.00300
08/19/09	3867.00	34.15	3832.85	No	<0.00100	<0.00100	<0.00100	<0.00300
10/30/09	3867.00	34.35	3832.65	No	<0.00100	<0.00100	<0.00100	<0.00300
11/19/09	3867.00	34.42	3832.58	No				
10/13/11	3867.00	36.14	3830.86	No				
02/22/12	3867.00	38.65	3828.35	No	<0.00100	<0.00100	<0.00100	<0.00300
07/17/12	3868.52	36.78	3831.74	No	<0.00100	<0.00100	<0.00100	<0.00300
10/03/12	3868.52	37.40	3831.12	No	<0.00100	<0.00100	<0.00100	<0.00300
05/15/13	3868.52	37.49	3831.03	No	0.000202 J	<0.00017	<0.00019	<0.00018
01/28/14	3868.52	38.07	3830.45	No	<0.0002	<0.00017	<0.00019	<0.00058
06/18/14	3868.52	38.38	3830.14	No	<0.0002	<0.00017	<0.00019	<0.00038
11/19/14	3868.52	38.54	3829.98	No	<0.00100	<0.00100	<0.00100	<0.002
12/08/15	3868.52	38.60	3829.92	No	<0.00100	<0.00100	<0.00100	<0.00300
04/26/16	3868.52	38.91	3829.61	No	<0.00100	<0.00100	<0.00100	<0.00300
10/24/16	3868.52	38.79	3829.73	No				
10/25/16	3868.52				Unable to sample due to silt in pump.			

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-6	Well Screen Interval (feet): 27.05-42.05							
05/22/17	3868.52	38.93	3829.59	No				
05/24/17	3868.52			No	<0.00050	<0.00050	<0.00050	<0.00050
11/28/17	3868.52	38.91	3829.61	No				
11/29/17	3868.52			No	<0.00050	<0.00050	<0.00050	<0.00050
07/17/18	3868.66	39.02	3829.64	No				
07/20/18	3868.66			No	<0.00050	<0.00050	<0.00050	<0.00050
Field Point MW-7	Well Screen Interval (feet): 24.35-39.35							
07/25/06	3864.14	29.05	3835.09	No	0.0279	0.00113	0.00385	0.0288
02/07/07	3864.14	29.08	3835.06	No	0.0332	<0.00100	0.0244	0.0276
04/15/08	3864.14	29.67	3834.47	No	0.0147	<0.00100	0.00422	0.0167
09/20/08	3864.14			No				
09/26/08	3864.14	30.17	3833.97	No	0.0194	<0.00100	0.00260	0.0161
02/05/09	3864.14	30.54	3833.60	No	0.0158	<0.00100	0.00424	0.0122
05/18/09	3864.14	31.08	3833.06	No	0.0138	<0.00100	0.00270	0.0107
08/19/09	3864.14	31.20	3832.94	No	0.0250	<0.00100	<0.00100	0.0160
10/30/09	3864.14	31.29	3832.85	No	0.0363	<0.00100	0.00193	0.0356
10/13/11	3864.14	33.24	3830.90	Sheen	0.0115	<0.00100	<0.00100	<0.00300
02/22/12	3864.14	34.20	3829.94	Sheen	0.0348	<0.00100	0.0026	<0.00300
07/17/12	3865.67	33.96	3831.73	0.02				
10/03/12	3865.67	34.16	3831.52	0.01				
05/14/13	3865.67	35.96	3829.98	0.32				
01/27/14	3865.67	35.22	3830.47	0.03				
06/17/14	3865.67	35.54	3830.13	Sheen				
11/18/14	3865.67	35.64	3830.03	Sheen				
12/07/15	3865.67	35.76	3829.92	0.01				
04/26/16	3865.67	36.00	3829.68	0.01				
10/24/16	3865.67	35.84	3829.83	(d)				
05/22/17	3865.67	Dry		No				
11/28/17	3865.67	36.11	3829.56	No				
Field Point MW-8	Well Screen Interval (feet): 23.05-38.05							
07/25/06	3863.80	28.74	3835.06	No	0.0176	0.001	0.00724	0.0236
02/07/07	3863.80	28.82	3834.98	No	0.00561	<0.00100	0.0138	0.00655
04/15/08	3863.80	29.40	3834.40	No	0.00319	<0.00100	0.00382	0.00614
09/20/08	3863.80			No				
09/26/08	3863.80	29.92	3833.88	No	0.00385	<0.00100	0.00722	0.0151
02/05/09	3863.80	30.31	3833.49	No	0.00337	<0.00100	0.00552	0.00313
05/18/09	3863.80	30.72	3833.08	No	0.00201	<0.00100	0.00406	0.00337
08/19/09	3863.80	29.95	3833.85	No	<0.00100	<0.00100	0.00318	0.00620
10/30/09	3863.80	29.99	3833.81	No	0.00124	<0.00100	<0.00100	0.00653
10/12/11	3863.80				Not measured or sampled.			
02/22/12	3863.80	33.40	3830.42	0.02				
07/17/12	3865.32	33.80	3831.68	0.19				
10/03/12	3865.32	33.96	3831.58	0.26				
05/14/13	3865.32				Unable to locate - Presumed destroyed.			
01/27/14	3865.32				Unable to locate - Presumed destroyed.			
06/17/14	3865.32				Unable to locate - Presumed destroyed.			
12/07/15	3865.32				Unable to locate - Presumed destroyed.			
04/26/16	3865.32				Unable to locate - Presumed destroyed.			
10/24/16	3865.32				Unable to locate - Presumed destroyed.			
05/22/17	3865.32				Unable to locate - Presumed destroyed.			
11/28/17	3865.32				Unable to locate - Presumed destroyed.			

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-8 07/17/18	Well Screen Interval (feet): 23.05-38.05 NE			Unable to locate - Presumed destroyed.				
Field Point MW-9	Well Screen Interval (feet): 27.64-42.64							
07/21/06	3868.29	33.48	3834.81	No	0.00137	0.001	0.001	0.003
02/06/07	3868.29	33.60	3834.69	No	0.00170	<0.00100	<0.00100	<0.00300
04/15/08	3868.29	34.10	3834.19	No	0.00254	<0.00100	<0.00100	<0.00300
09/21/08	3868.29			No				
09/26/08	3868.29	34.66	3833.63	No	<0.00100	<0.00100	<0.00100	<0.00300
02/05/09	3868.29	35.16	3833.13	No	0.00585	<0.00100	<0.00100	<0.00300
05/18/09	3868.29	35.44	3832.85	No	0.00404	<0.00100	<0.00100	<0.00300
08/19/09	3868.29	35.70	3832.59	No	<0.00100	<0.00100	<0.00100	<0.00300
10/30/09	3868.29	35.93	3832.36	No	<0.00100	<0.00100	<0.00100	<0.00300
10/13/11	3868.29	37.66	3830.63	No	<0.00100	<0.00100	<0.00100	<0.00300
02/22/12	3868.29	38.49	3829.80	No	0.00136	<0.00100	<0.00100	<0.00300
07/17/12	3869.82	38.30	3831.52	No	0.00529	<0.00100	0.00654	0.0132
10/03/12	3869.82	38.40	3831.50	0.10	0.135	0.00971	0.177	0.829
05/14/13	3869.82	38.99	3830.88	0.06				
01/28/14	3869.82	40.12	3830.14	0.53				
06/17/14	3869.82	40.22	3829.84	0.29				
11/17/14	3869.82	40.35	3829.64	0.20				
12/07/15	3869.82	40.51	3829.51	0.24				
04/26/16	3869.82	40.68	3829.37	0.28				
10/24/16	3869.82	40.71	3829.33	0.27				
05/22/17	3869.82	40.85	3829.26	0.35				
11/28/17	3869.82	40.80	3829.21	0.23				
07/17/18	3869.90	40.90	3829.27	0.33				
Field Point MW-10	Well Screen Interval (feet): 28.08-43.08							
07/21/06	3868.85	34.10	3834.75	No	0.0133	0.001	0.001	0.003
02/06/07	3868.85	34.22	3834.63	No	0.0115	<0.00100	<0.00100	<0.00300
04/15/08	3868.85	34.76	3834.09	No	0.00599	<0.00100	<0.00100	<0.00300
09/21/08	3868.85			No				
09/26/08	3868.85	35.34	3833.51	No	0.00635	<0.00100	<0.00100	<0.00300
02/05/09	3868.85	35.84	3833.01	No	0.00409	<0.00100	<0.00100	<0.00300
05/18/09	3868.85	36.12	3832.73	No	0.00348	<0.00100	<0.00100	<0.00300
08/19/09	3868.85	36.40	3832.45	No	<0.00100	<0.00100	<0.00100	<0.00300
10/30/09	3868.85	36.61	3832.24	No	<0.00100	<0.00100	<0.00100	<0.00300
11/19/09	3868.85	36.65	3832.20	No				
10/13/11	3868.85	38.30	3830.55	No	<0.00100	<0.00100	<0.00100	<0.00300
02/22/12	3868.85	38.83	3830.02	No	<0.00100	<0.00100	<0.00100	<0.00300
07/17/12	3870.38	38.96	3831.42	No	<0.00100	<0.00100	<0.00100	<0.00300
10/03/12	3870.38	39.46	3830.92	No	<0.00100	<0.00100	<0.00100	<0.00300
05/15/13	3870.38	39.72	3830.66	No	0.000879 J	<0.00017	<0.00019	<0.00018
05/15/13 D	3870.38	39.72	3830.66	No	0.00138	<0.00017	<0.00019	<0.00018
01/29/14	3870.38	40.33	3830.05	No	0.000898 J	<0.00017	<0.00019	<0.00058
06/18/14	3870.38	41.64	3828.74	No	Insufficient recharge for sampling.			
11/19/14	3870.38	40.89	3829.49	No	<0.00100	<0.00100	<0.00100	<0.002
11/19/14 D	3870.38	40.89	3829.49	No	<0.00100	<0.00100	<0.00100	<0.002
12/07/15	3870.38	40.91	3829.47	No	Insufficient water to sample.			
04/26/16	3870.38	41.47	3828.91	No	Insufficient water to sample.			
10/24/16	3870.38	41.17	3829.21	No	Insufficient water to sample.			
05/22/17	3870.38	41.25	3829.13	No				
05/24/17	3870.38			No	<0.00050	<0.00050	<0.00050	<0.00050

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-10	Well Screen Interval (feet): 28.08-43.08							
11/28/17	3870.38	41.29	3829.09	No				
11/29/17	3870.38			No	0.00051	<0.00050	<0.00050	<0.00050
07/17/18	3870.47	41.27	3829.20	No				
07/20/18	3870.47	41.30	3829.17	No	0.00078	<0.00050	<0.00050	<0.00050
Field Point MW-11	Well Screen Interval (feet): 29.00-44.00							
04/30/08	3868.06	31.50	3836.56	No	<0.00100	<0.00100	<0.00100	<0.00300
09/21/08	3868.06			No				
09/26/08	3868.06	34.65	3833.41	No	0.00351	<0.00100	<0.00100	<0.00300
02/05/09	3868.06	35.12	3832.94	No	0.00401	<0.00100	<0.00100	<0.00300
05/18/09	3868.06	35.42	3832.64	No	0.00382	<0.00100	<0.00100	<0.00300
08/19/09	3868.06	35.75	3832.31	No	<0.00100	<0.00100	<0.00100	<0.00300
10/30/09	3868.06	35.95	3832.11	No	<0.00100	<0.00100	<0.00100	<0.00300
10/13/11	3868.06	37.60	3830.46	No	<0.00100	<0.00100	<0.00100	<0.00300
02/22/12	3868.06	38.06	3830.00	No	<0.00100	<0.00100	<0.00100	<0.00300
07/17/12	3869.58	38.26	3831.32	No	<0.00100	<0.00100	<0.00100	<0.00300
10/03/12	3869.58	38.50	3831.08	No	<0.00100	<0.00100	<0.00100	<0.00300
05/15/13	3869.58	39.01	3830.57	No	0.000606 J	<0.00017	<0.00019	<0.00018
01/28/14	3869.58	39.57	3830.01	No	<0.000200	<0.00017	<0.00019	<0.00058
06/18/14	3869.58	39.95	3829.63	No	<0.000200	<0.00017	<0.00019	<0.00038
11/19/14	3869.58	40.20	3829.38	No	<0.00100	<0.00100	<0.00100	<0.002
12/08/15	3869.58	40.29	3829.29	No	<0.00100	<0.00100	<0.00100	<0.00300
04/27/16	3869.58	40.33	3829.25	No	<0.00100	<0.00100	<0.00100	<0.00300
10/24/16	3869.58	40.49	3829.09	No				
10/25/16	3868.06			No	<0.00100	<0.00100	<0.00100	<0.00300
05/22/17	3868.06	40.54	3827.52	No				
05/24/17	3868.06			No	<0.00050	0.00021 J	<0.00050	<0.00050
11/28/17	3868.06	40.61	3827.45	No				
11/29/17	3868.06			No	<0.00050	<0.00050	<0.00050	0.00022 J
07/17/18	3869.68	40.58	3829.10	No				
07/18/18	3869.68	40.58	3829.10	No	<0.00050	0.00050 J	<0.00050	<0.00050
Field Point MW-12	Well Screen Interval (feet): 30.00-45.00							
04/30/08	3867.74	31.50	3836.24	No	0.0504	0.00401	0.242	0.598
09/21/08	3867.74			No				
09/26/08	3867.74	34.12	3833.62	No	0.222	0.0116	0.978	1.84
02/05/09	3867.74	34.67	3833.07	No	0.178	0.0134	1.19	2.22
05/19/09	3867.74	34.98	3832.76	No	0.143	0.0128	0.882	1.65
08/19/09	3867.74	35.20	3832.54	No	0.162	0.00987	0.937	1.68
10/30/09	3867.74	35.45	3832.29	No	0.162	0.0128	1.02	1.99
10/13/11	3867.74	37.12	3830.62	No	0.055	0.00603	0.476	1.01
02/22/12	3867.74	37.46	3830.28	No	0.059	0.005	0.869	1.66
07/17/12	3869.27	37.90	3831.37	No	0.050	0.0116	0.737	0.562
10/03/12	3869.27	38.10	3831.17	No	0.054	0.0152	0.822	1.67
05/14/13	3869.27	38.60	3830.67	Sheen				
01/28/14	3869.27	39.30	3830.04	0.09				
06/17/14	3869.27	39.60	3829.74	0.09				
11/17/14	3869.27	40.50	3829.54	0.93				
12/07/15	3869.27	40.66	3829.46	1.03				
04/26/16	3869.27	40.38	3829.33	0.53				
10/24/16	3869.27	40.34	3829.21	0.39				
05/22/17	3869.27	40.50	3829.18	0.49				
11/28/17	3869.27	40.58	3829.09	0.48				

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-12	Well Screen Interval (feet): 30.00-45.00							
07/17/18	3869.40	40.57	3829.21	0.46				
Field Point MW-13	Well Screen Interval (feet): 30.00-45.00							
04/30/08	3867.11	29.65	3837.46	No	3.64	0.102	0.292	0.499
09/21/08	3867.11			No				
09/26/08	3867.11	33.11	3834.00	No	9.26	0.513	0.972	1.71
02/06/09	3867.11	33.62	3833.49	No	10.1	0.554	1.050	1.89
05/19/09	3867.11	33.88	3833.23	No	8.44	0.323	0.842	1.38
08/19/09	3867.11	34.32	3832.89	0.12	8.13	0.305	0.950	2.07
10/30/09	3867.11	34.45	3832.72	0.07	9.55	0.218	1.03	1.75
10/13/11	3867.11	36.90	3831.00	0.95				
02/22/12	3867.11	37.78	3829.89	0.68				
07/17/12	3868.63	38.85	3831.86	2.50				
10/03/12	3868.63	39.02	3831.67	2.48				
05/14/13	3868.63	38.89	3831.30	1.88				
01/28/14	3868.63	39.91	3830.47	2.11				
06/17/14	3868.63	39.91	3830.19	1.77				
11/18/14	3868.63	41.56	3829.97	3.49				
12/07/15	3868.63	41.31	3829.94	3.16				
04/26/16	3868.63	40.12	3829.79	1.54				
10/24/16	3868.63	39.55	3829.87	0.95				
05/22/17	3868.63	39.91	3828.78	0.07				
11/28/17	3868.63	39.85	3829.62	1.01				
07/17/18	3868.76	39.86	3829.70	0.96				
Field Point MW-14	Well Screen Interval (feet): 27.00-42.00							
04/30/08	3866.92	29.48	3837.44	No	0.0449	0.00125	0.0231	0.0341
09/21/08	3866.92			No				
09/26/08	3866.92	32.82	3834.10	No	0.123	0.00187	0.0164	0.0911
02/06/09	3866.92	33.37	3833.55	No	0.240	0.00986	0.246	0.166
05/19/09	3866.92	33.64	3833.28	No	0.120	0.00203	0.0971	0.0386
08/19/09	3866.92	33.98	3832.94	No	0.112	<0.00100	0.110	0.0444
10/30/09	3866.92	34.15	3832.77	No	0.119	0.00168	0.0895	0.0645
10/13/11	3866.92	35.85	3831.07	No	0.075	<0.00100	0.0536	0.044
02/22/12	3866.92	36.19	3830.73	No	0.0782	<0.00100	0.0646	0.0212
07/17/12	3868.47	36.54	3831.93	No	0.0798	<0.00100	0.0731	0.0535
10/03/12	3868.47	36.90	3831.57	No	0.107	<0.00100	0.0965	0.0179
05/14/13	3868.47	38.39	3831.27	1.43				
01/28/14	3868.47	38.81	3830.55	1.07				
06/17/14	3868.47	38.76	3830.27	0.67				
11/18/14	3868.47	40.75	3830.04	2.79				
12/07/15	3868.47	41.49	3830.03	3.68				
04/26/16	3868.47	40.85	3829.87	2.71				
10/24/16	3868.47	40.86	3830.05	2.94				
05/22/17	3868.47	41.61	3829.72	3.44				
11/28/17	3868.47	40.00	3829.62	1.39				
07/17/18	3868.62	39.25	3829.79	0.50				
Field Point MW-15	Well Screen Interval (feet): 29.00-44.00							
04/30/08	3867.19	29.74	3837.45	No	1.230	0.167	0.320	0.554
09/21/08	3867.19			No				
09/26/08	3867.19	33.26	3833.94	0.01	6.540	1.350	1.130	2.4
02/15/09	3867.19	33.82	3833.44	0.09				
05/19/09	3867.19	34.20	3833.12	0.16	3.800	0.632	0.848	1.8

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-15	Well Screen Interval (feet): 29.00-44.00							
08/19/09	3867.19	34.40	3832.91	0.15	3.850	0.892	0.799	2.25
10/30/09	3867.19	34.60	3832.69	0.12	8.96	0.228	0.949	1.66
10/13/11	3867.19	38.04	3831.01	2.24				
02/22/12	3867.19	38.41	3830.71	2.32				
07/17/12	3868.74	38.20	3832.03	1.80				
10/03/12	3868.74	39.95	3831.57	3.35				
05/14/13	3868.74	40.11	3831.12	3.00				
01/28/14	3868.74	40.21	3830.47	2.34				
06/17/14	3868.74	39.35	3830.19	0.96				
11/18/14	3868.74	39.76	3830.13	1.39				
12/07/15	3868.74	40.31	3830.25	2.19				
04/26/16	3868.74	39.61	3829.89	0.91				
10/24/16	3868.74	38.70	3830.41	0.44				
05/22/17	3868.74	38.92	3829.84	0.02				
11/28/17	3868.74	38.96	3830.03	0.30				
07/17/18	3868.86	39.33	3829.79	0.31				
Field Point MW-16	Well Screen Interval (feet): 26.50-41.50							
04/30/08	3867.02	29.95	3837.07	No	0.00321	<0.00100	0.0237	0.0376
09/21/08	3867.02			No				
09/26/08	3867.02	32.94	3834.08	No	0.00317	<0.00100	0.0253	0.0790
02/06/09	3867.02	33.39	3833.63	No	0.0113	<0.00100	0.0426	0.0634
05/18/09	3867.02	33.73	3833.29	No	0.00670	<0.00100	0.0488	0.0526
08/19/09	3867.02	34.00	3833.02	No	0.00419	<0.00100	0.0251	0.0797
10/30/09	3867.02	34.17	3832.85	No	0.00391	<0.00100	0.0128	0.0564
10/30/09 D	3867.02	34.17	3832.85	No	0.00576	<0.00100	0.0350	0.122
10/13/11	3867.02	35.95	3831.07	No	0.00190	<0.00100	0.0145	0.0342
02/22/12	3867.02	36.45	3830.57	No	<0.00100	<0.00100	<0.00100	<0.00300
07/17/12	3868.54	36.65	3831.89	No	0.00157	<0.00100	0.01860	0.01050
10/03/12	3868.54	37.10	3831.44	No	0.00192	<0.00100	0.06370	0.07700
05/14/13	3868.54	38.05	3831.20	0.86				
01/27/14	3868.54	39.11	3830.67	1.49				
06/17/14	3868.54	39.10	3830.32	1.06				
11/18/14	3868.54	38.88	3830.44	0.94				
12/07/15	3868.54	38.61	3830.52	0.71				
04/26/16	3868.54	39.23	3830.02	0.85				
10/24/16	3868.54	38.36	3830.61	0.52				
05/22/17	3868.54	39.30	3829.82	0.70				
11/28/17	3868.54	38.79	3830.17	0.51				
07/17/18	3868.68	39.34	3829.87	0.64				
Field Point MW-17	Well Screen Interval (feet): 29.50-44.50							
08/19/09	3867.64	35.22	3832.42	No	1.28	0.0146	0.845	1.19
10/30/09	3867.64	35.40	3832.24	No	1.52	0.0211	0.986	1.55
10/13/11	3867.64	37.10	3830.54	No	0.68	<0.00100	0.407	0.524
02/22/12	3867.64	37.40	3830.24	No	0.871	<0.00100	0.727	1.16
07/17/12	3869.14	37.75	3831.39	No	0.649	0.00494	0.504	0.438
10/03/12	3869.14	38.20	3830.94	No	0.825	0.0103	0.682	1.22
05/14/13	3869.14	38.52	3830.62	Sheen				
01/28/14	3869.14	39.14	3830.00	Sheen				
06/17/14	3869.14	39.43	3829.71	Sheen				
11/07/14	3869.14	39.64	3829.50	Sheen				
12/09/15	3869.14	39.72	3829.42	Sheen				

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-17	Well Screen Interval (feet): 29.50-44.50							
04/26/16	3869.14	38.36	3830.78	Sheen				
10/24/16	3869.14	39.93	3829.21	(d)				
05/22/17	3869.14	40.00	3829.16	0.02				
11/28/17	3869.14	40.09	3829.05	No				
11/29/17	3869.14			No	0.17	<0.012	0.77	0.27
07/17/18	3869.27	40.08	3829.19	No				
07/18/18	3869.27			No	0.15	<0.010	0.72	0.20
Field Point MW-18	Well Screen Interval (feet): 27.00-42.00							
08/19/09	3867.31	34.45	3832.86	No	2.40	0.0206	0.681	0.836
10/30/09	3867.31	34.60	3832.71	No	2.88	0.0144	0.779	0.703
10/13/11	3867.31	36.26	3831.05	No	1.81	0.00572	0.274	0.108
02/22/12	3867.31	36.59	3830.73	0.01				
07/17/12	3868.79	37.30	3831.82	0.40				
10/03/12	3868.79	38.20	3831.34	0.90				
05/14/13	3868.79	38.23	3831.22	0.80				
01/28/14	3868.79	38.92	3830.53	0.80				
06/17/14	3868.79	38.99	3830.26	0.56				
11/17/14	3868.79	39.12	3830.04	0.44				
12/07/15	3868.79	39.15	3829.92	0.34				
04/26/16	3868.79	39.36	3829.77	0.41				
10/24/16	3868.79	39.19	3829.77	0.21				
05/22/17	3868.79	39.45	3829.62	0.34				
11/28/17	3868.79	39.41	3829.61	0.28				
07/17/18	3868.94	39.50	3829.70	0.31				
Field Point MW-19	Well Screen Interval (feet): 27.00-42.00							
08/19/09	3867.26	34.22	3833.04	No	<0.00100	<0.00100	<0.00100	<0.00300
10/30/09	3867.26	34.40	3832.86	No	<0.00100	<0.00100	<0.00100	<0.00300
10/13/11	3867.26	36.08	3831.18	No	<0.00100	<0.00100	<0.00100	<0.00300
02/22/12	3867.26	37.14	3830.12	No	0.00188	<0.00100	0.192	0.329
07/17/12	3868.75	36.81	3831.94	No	<0.00100	<0.00100	<0.00100	<0.00300
10/03/12	3868.75	36.98	3831.77	No	<0.00100	<0.00100	<0.00100	<0.00300
05/15/13	3868.75	37.51	3831.24	No	<0.000200	<0.00017	<0.00019	<0.00018
01/29/14	3868.75	38.15	3830.60	No	<0.000200	<0.00017	<0.00019	<0.00058
06/18/14	3868.75	38.43	3830.32	No	<0.000200	<0.00017	<0.00019	<0.00038
11/18/14	3868.75	38.66	3830.09	No	<0.00100	<0.00100	<0.00100	<0.002
12/09/15	3868.75	38.68	3830.07	No	0.00413	<0.00100	<0.00100	0.0714
04/27/16	3868.75	38.91	3829.84	No	0.00416	<0.00100	<0.00100	0.0569
10/24/16	3868.75	38.86	3829.89	No				
10/25/16	3868.75			No	0.00153	<0.00100	<0.00100	0.0343
05/22/17	3868.75	39.00	3829.75	No				
05/24/17	3868.75			No	0.0011	0.00020 J	0.00060	0.0030
11/28/17	3868.75	39.08	3829.67	No				
11/29/17	3868.75			No	0.0010	<0.00050	0.00098	0.00053
07/17/18	3868.90	39.11	3829.79	No				
07/18/18	3868.90			No	0.00034 J	0.00072	0.00037 J	0.00021 J
Field Point MW-20	Well Screen Interval (feet): 29.50-44.50							
08/19/09	3867.50	34.69	3832.81	No	<0.00100	<0.00100	<0.00100	<0.00300
10/30/09	3867.50	34.85	3832.65	No	<0.00100	<0.00100	<0.00100	<0.00300
10/13/11	3867.50	36.55	3830.95	No	<0.00100	<0.00100	<0.00100	<0.00300
02/22/12	3867.50	37.09	3830.41	No	<0.00100	<0.00100	<0.00100	<0.00300
07/17/12	3868.97	37.31	3831.66	No	<0.00100	<0.00100	<0.00100	<0.00300

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-20	Well Screen Interval (feet): 29.50-44.50							
10/03/12	3868.97	37.48	3831.49	No	<0.00100	<0.00100	<0.00100	<0.00300
05/15/13	3868.97	37.99	3830.98	No	<0.000200	<0.00017	<0.00019	<0.00018
01/29/14	3868.97	38.65	3830.32	No	<0.000200	<0.00017	<0.00019	<0.00058
06/18/14	3868.97	38.93	3830.04	No	<0.000200	<0.00017	<0.00019	<0.00038
11/18/14	3868.97	39.16	3829.81	No	0.0016	<0.00100	<0.00100	0.0098
12/07/15	3868.97	39.90	3829.83	0.92				
04/26/16	3868.97	40.04	3829.70	0.93				
10/24/16	3868.97	40.50	3829.60	1.36				
05/22/17	3868.97	40.42	3829.53	1.18				
11/28/17	3868.97	39.66	3829.58	0.33				
07/17/18	3869.15	40.48	3829.66	1.19				
Field Point MW-21	Well Screen Interval (feet): 29.50-44.50							
08/19/09	3867.43	34.42	3833.01	No	<0.00100	<0.00100	<0.00100	<0.00300
10/30/09	3867.43	34.60	3832.83	No	<0.00100	<0.00100	<0.00100	<0.00300
10/13/11	3867.43	36.24	3831.19	No	<0.00100	<0.00100	<0.00100	<0.00300
02/22/12	3867.43	36.75	3830.68	No	<0.00100	<0.00100	<0.00100	<0.00300
07/17/12	3868.89	36.95	3831.94	No	<0.00100	<0.00100	<0.00100	<0.00300
10/03/12	3868.89	37.15	3831.74	No	<0.00100	<0.00100	<0.00100	<0.00300
05/15/13	3868.89	37.67	3831.22	No	<0.000200	<0.00017	<0.00019	<0.00018
01/29/14	3868.89	38.35	3830.54	No	<0.000200	<0.00017	<0.00019	<0.00058
06/18/14	3868.89	38.62	3830.27	No	<0.000200	<0.00017	<0.00019	<0.00038
11/18/14	3868.89	38.87	3830.02	No	<0.00100	<0.00100	<0.00100	<0.002
12/08/15	3868.89	38.85	3830.04	No	0.0124	<0.00100	<0.00100	0.00780
04/27/16	3868.89	39.05	3829.84	No	0.0115	<0.00100	<0.00100	0.0104
10/24/16	3868.89	39.13	3829.76	No				
10/25/16	3868.89			No	0.00383	<0.00100	<0.00100	<0.00300
05/22/17	3868.89	39.26	3829.73	0.12				
11/28/17	3868.89	39.63	3829.62	0.43				
07/17/18	3869.07	40.05	3829.86	1.01				
Field Point MW-22	Well Screen Interval (feet): 30.00-45.00							
10/30/09	3868.21	36.27	3831.94	No	<0.00100	<0.00100	<0.00100	<0.00300
10/13/11	3868.21	37.90	3830.31	No	<0.00100	<0.00100	<0.00100	<0.00300
02/22/12	3868.21	38.26	3829.95	No	<0.00100	<0.00100	<0.00100	<0.00300
07/17/12	3869.73	38.60	3831.13	No	<0.00100	<0.00100	<0.00100	<0.00300
10/03/12	3869.73	38.80	3830.93	No	<0.00100	<0.00100	<0.00100	<0.00300
05/15/13	3869.73	39.36	3830.37	No	<0.000200	<0.00017	<0.00019	<0.00018
01/29/14	3869.73	40.00	3829.73	No	<0.000200	<0.00017	<0.00019	<0.00058
01/29/14 D	3869.73	40.00	3829.73	No	<0.000200	<0.00017	<0.00019	<0.00058
06/18/14	3869.73	40.29	3829.44	No	<0.000200	<0.00017	<0.00019	<0.00038
11/19/14	3869.73	40.54	3829.19	No	<0.00100	<0.00100	<0.00100	<0.002
12/08/15	3869.73	40.62	3829.11	No	<0.00100	<0.00100	<0.00100	<0.00300
04/27/16	3869.73	40.79	3828.94	No	<0.00100	<0.00100	<0.00100	<0.00300
10/24/16	3869.73	40.82	3828.91	No				
10/25/16	3869.73			No	<0.00100	<0.00100	<0.00100	<0.00300
05/22/17	3869.73	40.89	3828.84	No				
05/24/17	3869.73			No	<0.00050	<0.00050	<0.00050	<0.00050
11/28/17	3869.73	40.90	3828.83	No				
11/29/17	3869.73			No	<0.00050	<0.00050	<0.00050	<0.00050
07/17/18	3869.86	40.90	3828.96	No				
07/18/18	3869.86	40.90	3828.96	No	<0.00050	0.00041 J	<0.00050	<0.00050

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-23	Well Screen Interval (feet): 31.00-46.00							
02/22/12	3867.58	36.77	3830.81	No	<0.00100	<0.00100	<0.00100	<0.00300
07/17/12	3869.08	37.13	3831.95	No	<0.00100	<0.00100	<0.00100	<0.00300
10/03/12	3869.08	37.30	3831.78	No	<0.00100	<0.00100	<0.00100	<0.00300
05/15/13	3869.08	37.88	3831.20	No	<0.000200	<0.00017	<0.00019	<0.00018
01/29/14	3869.08	38.51	3830.57	No	<0.000200	<0.00017	<0.00019	<0.00058
06/18/14	3869.08	38.79	3830.29	No	<0.000200	<0.00017	<0.00019	<0.00038
11/18/14	3869.08	39.03	3830.05	No	0.13	<0.00100	0.0092	0.065
12/08/15	3869.08	39.01	3830.07	No	1.45	<0.00100	0.239	<0.00300
04/27/16	3869.08	38.24	3830.84	No	0.473	<0.00500	0.0887	<0.0150
10/24/16	3869.08	34.35	3834.82	0.11				
05/22/17	3869.08	39.42	3829.75	0.11				
11/28/17	3869.08	39.50	3829.65	0.08				
07/17/18	3869.22	39.46	3829.82	0.07				
Field Point MW-24	Well Screen Interval (feet): 28.00-43.00							
02/22/12	3866.60	35.74	3830.89	0.04				
07/17/12	3867.88	39.70	3831.62	4.15				
10/03/12	3867.88	40.09	3831.40	4.35				
05/14/13	3867.88	38.05	3831.35	1.83				
01/28/14	3867.88	41.92	3830.28	5.21				
06/17/14	3867.88	43.09	3830.04	6.33				
11/18/14	3867.88	43.30	3829.98	6.50				
12/07/15	3867.88	42.51	3829.94	5.50				
04/27/16	3867.88	41.39	3829.54	3.68				
10/24/16	3867.88	42.33	3830.00	5.36				
05/22/17	3867.88	39.82	3829.55	1.80				
11/28/17	3867.88	40.54	3830.11	3.34				
07/17/18	3868.04	39.49	3829.64	1.31				
Field Point MW-25	Well Screen Interval (feet): 28.00-43.00							
02/22/12	3867.61	37.00	3830.61	No	8.7	1.12	0.911	2.7
07/17/12	3868.99	37.84	3831.58	0.52				
10/03/12	3868.99	38.92	3830.91	1.01				
05/14/13	3868.99	40.02	3830.99	2.43				
01/28/14	3868.99	41.72	3830.26	3.60				
06/17/14	3868.99	41.74	3829.99	3.30				
11/17/14	3868.99	41.45	3829.77	2.69				
12/07/15	3868.99	40.96	3829.73	2.05				
04/26/16	3868.99	40.00	3829.57	0.70				
10/24/16	3868.99	41.03	3829.53	1.89				
05/22/17	3868.99	41.13	3829.42	1.88				
11/28/17	3868.99	41.57	3829.34	2.31				
07/17/18	3869.14	40.20	3829.52	0.70				
Field Point MW-26	Well Screen Interval (feet): 30.00-45.00							
02/22/12	3867.59	37.28	3830.31	No	<0.00100	<0.00100	<0.00100	<0.00300
07/17/12	3868.98	37.90	3831.08	No	0.00177	<0.00100	<0.00100	<0.00300
10/03/12	3868.98	37.93	3831.05	No	0.00236	<0.00100	<0.00100	<0.00300
05/15/13	3868.98	38.37	3830.61	No	0.0153	<0.00017	<0.00019	<0.00018
01/29/14	3868.98	39.01	3829.97	No	0.0129	<0.00017	<0.00019	<0.00058
06/18/14	3868.98	39.30	3829.68	No	0.000672 J	<0.00017	<0.00019	<0.00038
11/19/14	3868.98	39.55	3829.43	No	0.0033	<0.00100	<0.00100	<0.002
12/08/15	3868.98	39.58	3829.40	No	<0.00100	<0.00100	<0.00100	<0.00300
04/27/16	3868.98	39.78	3829.20	No	0.0242	<0.00100	<0.00100	<0.00300

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Well Elev (feet)	GW Depth (feet)	GW Elev (feet)	NAPL (feet)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)
NMED WQCC HHS					0.01	0.75	0.75	0.62
Field Point MW-26	Well Screen Interval (feet): 30.00-45.00							
10/24/16	3868.98	39.81	3829.17	No				
10/25/16	3868.98			No	<0.00100	<0.00100	<0.00100	<0.00300
05/22/17	3868.98	39.86	3829.12	No				
05/24/17	3868.98			No	0.037	0.00023 J	<0.00050	0.00044 J
11/28/17	3868.98	39.95	3829.03	No				
11/29/17	3868.98			No	0.00061	<0.00050	0.00025 J	0.00046 J
07/17/18	3869.15	39.89	3829.26	No				
07/18/18	3869.15			No	0.12	0.0012 J	0.059	0.17
Field Point MW-27	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.12	39.63	3829.49	No				
07/19/18	3869.12	39.60	3829.52	No	<0.00050	0.00025 J	<0.00050	<0.00050
Field Point MW-28	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.32	39.65	3829.67	No				
07/19/18	3869.32			No	<0.00050	0.00025 J	<0.00050	<0.00050
Field Point MW-29	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.36	39.52	3829.84	No				
07/19/18	3869.36	39.47	3829.89	No	<0.00050	<0.00050	<0.00050	<0.00050
Field Point MW-30	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.10	39.10	3830.00	No				
07/19/18	3869.10			No	<0.00050	0.00025 J	<0.00050	<0.00050
Field Point MW-31	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3869.05	39.90	3829.15	No				
07/19/18	3869.05			No	<0.00050	0.00039 J	<0.00050	0.0010
Field Point MW-32	Well Screen Interval (feet): 35.00-50.00							
07/17/18	3870.35	41.28	3829.07	No				
07/19/18	3870.35			No	0.0041	0.00022 J	0.00042 J	0.012
Field Point SB-1GW	Grab Groundwater Sample							
10/28/11				No	0.00719	<0.00100	<0.00100	<0.00300
Field Point SB-2GW	Grab Groundwater Sample							
10/28/11				No	1.88	0.0938	0.138	0.26
Field Point SB-3GW	Grab Groundwater Sample							
10/28/11				No	1.94	2.42	0.986	2.27
Field Point SB-4GW	Grab Groundwater Sample							
10/28/11				No	3.91	0.0703	0.587	1.15
Field Point SB-5GW	Grab Groundwater Sample							
10/28/11				No	2.9	0.024	0.034	0.218
Field Point SB-6GW	Grab Groundwater Sample							
10/28/11				No	0.00133	<0.00100	0.00168	<0.00300
Field Point SB-7GW	Grab Groundwater Sample							
10/28/11				No	0.135	0.00135	0.0263	0.0759

TABLE 4
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
Gladiola Station
Lea County, New Mexico
Cardno 3612

Notes: Data collected prior to December 8, 2015 provided by AECOM.
ELEV = Elevation.
GW = Groundwater.
NAPL = Non-aqueous phase liquid.
Groundwater elevations are adjusted for NAPL thickness using a relative density of 0.83.
NMED WQCC HHS = New Mexico Environmental Department Water Quality Control Commission Human Health Standard for groundwater with 10,000 mg/l TDS or less.
Bolded values equal or exceed applicable regulatory limits.
Naphthalene is analyzed by EPA Method 8270C unless otherwise noted.
Total naphthalenes are the sum of 1- and 2-methylnaphthalene and naphthalene.
TDS = Total dissolved solids.
mg/l = Milligrams per liter.
BDL = Below laboratory detection limits.
< = Not detected at or above stated laboratory reporting limit.
A-01 = Could not obtain constant weight.
D = Duplicate sample.
J = Estimated value between method detection limit and practical quantitation limit.
R1 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the higher value was reported.
R10 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported due to apparent chromatographic problems.
R12 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported.
X = Pre-purge/no-purge sample.
(a) = Analyzed by EPA Method 8310.
(b) = Analyzed by EPA Method 8260B.
(c) = Analyzed method unknown.
(d) = Analyzed to determine the presense of NAPL.

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-1	Well Screen Interval (feet): 22.71-42.71												
07/24/06	<0.00101	<0.00101	0.141	0.0165	0.00260	0.000971	<0.000202	0.00128	0.0111	<0.000202	0.0788	0.00614	<0.000202
02/08/07	<0.00105	<0.00526	<0.00526	0.00603	<0.000105	0.00267	<0.000211	0.000886	0.00615	0.0104	0.153	0.0153	<0.000211
09/26/08	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
05/19/09	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
08/19/09	<0.0200	<0.100	0.0871 R12	0.162 R1	<0.00200	0.0369	0.0358 R1	0.0321 R1	0.323	0.0550 R1	1.660 R1	0.0895	0.0210
10/30/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	0.000992	<0.000200	0.00634 R1	0.00163	<0.000200
10/12/11	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	0.000476	<0.0000952
Field Point MW-2	Well Screen Interval (feet): 27.59-47.59												
07/25/06	<0.000939	<0.00217	0.228	0.0300	0.00533	0.0173	0.000665	0.00101	0.0420	0.00186	0.155	0.00823	<0.000188
02/08/07	<0.00109	<0.00543	0.142	0.0128	<0.000109	0.00297	<0.000217	0.00150	0.00802	0.0156	0.0491	0.0174	<0.000217
09/26/08	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971	<0.0971
08/19/09	<0.00513	<0.0256	0.0783 R12	0.157	<0.000513	0.0318 R1	0.0357 R1	0.0269 R1	0.311	0.0530 R1	0.673 R1	0.0992	0.0216
10/30/09	<0.00100	<0.00500	<0.00100	0.00507 R1	0.000684 R1	0.00124 R1	0.00133 R1	0.00166 R1	0.0104	0.00390 R1	0.0400 R1	0.00407	<0.000200
Field Point MW-3	Well Screen Interval (feet): 24.20-44.20												
07/24/06	<0.00106	<0.00106	0.127	0.0160	0.00245	0.000869	<0.000213	0.00131	0.0113	<0.000213	0.0772	0.00575	<0.000213
02/08/07	<0.00111	<0.00556	0.0914	0.00885	0.00172	0.00209	<0.000222	0.00121	0.00849	0.0136	0.0437	0.012	<0.000222
09/26/08	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105
05/19/09	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105
08/19/09	<0.00103	<0.00513	0.00966 R12	0.0234 R1	0.00225 R1	0.00490 R1	0.00422 R1	0.00416 R1	0.0461	0.00630 R1	0.0907 R1	0.00825	0.00271
10/30/09	<0.000990	<0.00495	0.00168 R12	0.00741 R1	0.000418 R1	0.00208 R1	0.00254 R1	0.00286 R1	0.0147	0.00554 R1	0.0537 R1	0.00478	<0.000198

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-4	Well Screen Interval (feet): 23.97-38.97												
07/25/06	<0.000939	0.0026	<0.000939	<0.000188	<0.0000939	<0.0000939	<0.000188	<0.000131	<0.0000939	<0.000188	<0.000188	0.000947	<0.000188
02/07/07	<0.00104	<0.00521	<0.00104	<0.000208	<0.000104	<0.000104	<0.000208	<0.000146	<0.000104	<0.000208	0.0168	0.0023	<0.000208
04/15/08	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990
09/26/08	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980
05/19/09	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526
08/19/09	<0.000971	<0.00485	<0.000971	<0.000194	<0.0000971	<0.0000971	<0.000194	<0.000136	0.00217	<0.000194	0.00365 R1	0.00126	0.000459 R1
10/30/09	<0.000990	<0.00495	<0.000990	0.0124 R1	<0.000099	0.00316 R1	0.00467 R1	0.00399 R1	0.00447	0.00919 R1	0.103 R1	0.0092	<0.000198
Field Point MW-5	Well Screen Interval (feet): 27.19-47.19												
07/20/06	<0.00472	0.00565	<0.000943	<0.000189	<0.0000943	<0.0000943	<0.000189	<0.000132	0.000356	<0.000189	0.00309	<0.000472	<0.000189
02/07/07	<0.00118	<0.00588	0.0113	<0.000235	<0.000118	<0.000118	<0.000235	<0.000165	<0.000118	<0.000235	0.00227	0.00233	<0.000235
04/15/08	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990
09/26/08	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962
05/19/09	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526
08/19/09	<0.000971	<0.00485	<0.000971	<0.000194	<0.0000971	<0.0000971	<0.000194	<0.000136	0.000639	<0.000194	0.00253 R1	0.00241	<0.000194
08/19/09 D	<0.000980	<0.00490	<0.000980	<0.000196	<0.0000980	0.000191 R1	<0.000196	<0.000137	0.000994	<0.000196	0.00269 R1	0.00206 R1	<0.000196
10/30/09	<0.00102	<0.00510	<0.00102	<0.000204	<0.000102	<0.000102	<0.000204	<0.000143	0.000313	<0.000204	0.00349 R1	0.00213	<0.000204
10/12/11	0.000367	0.000178	0.000144	0.000122	0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	0.00167	<0.000111
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	0.00202	<0.00190
07/17/12 D	<0.00190	<0.00190	0.00214	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	0.00218	<0.00190	<0.00190
10/03/12	<0.00196	<0.00196	<0.00196	<0.00196	<0.00196	<0.00196	<0.00196	<0.00196	<0.00196	<0.00196	<0.00196	0.00253	<0.00196
10/03/12 D	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	0.00249	<0.00189

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-6	Well Screen Interval (feet): 27.05-42.05												
07/21/06	<0.00467	<0.000943	<0.000943	<0.000189	<0.0000943	<0.0000943	<0.000189	<0.000132	<0.0000943	<0.000189	<0.000189	<0.000472	<0.000189
02/07/07	<0.00111	<0.00556	<0.00111	<0.000222	<0.000111	<0.000111	<0.000222	<0.000156	<0.000111	<0.000222	<0.000222	0.000637	<0.000222
04/15/08	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990
09/26/08	<0.00943	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962	<0.0962
05/18/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952
08/19/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	<0.000200	<0.000500	<0.000200
11/19/09	<0.000980	<0.00490	<0.000980	<0.000196	<0.0000980	<0.0000980	<0.000196	<0.000137	<0.0000980	<0.000196	<0.000196	<0.000490	<0.000196
10/13/11	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	0.00189	<0.00189
05/15/13	<0.0000187	<0.0000374	<0.0000187	<0.0000187	<0.0000187	<0.0000187	<0.000028	<0.0000187	<0.0000187	<0.0000187	<0.0000374	0.0002	<0.0000187
01/28/14	0.0000215 J	<0.0000282	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000282	0.000178	<0.0000188
06/18/14	0.0000949	<0.0000284	<0.0000284	<0.000019	<0.000019	<0.000019	<0.000019	<0.000019	<0.000019	<0.000019	<0.0000284	0.0000517 J	<0.000019
11/19/14	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00014	<0.0001
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	0.000168	<0.0000952
04/26/16	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	0.000101	<0.0000952
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
11/29/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00017 J	<0.00019
07/20/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-7	Well Screen Interval (feet): 24.35-39.35												
07/25/06	<0.000939	<0.000939	<0.000939	<0.000188	<0.0000939	<0.0000939	<0.000188	<0.000131	<0.0000939	<0.000188	<0.000188	<0.000469	<0.000188

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-7	Well Screen Interval (feet): 24.35-39.35												
02/07/07	<0.00109	<0.00543	<0.00109	<0.000217	<0.000109	<0.000109	<0.000217	<0.000152	<0.000109	<0.000217	<0.000217	0.000772	<0.000217
04/15/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971
09/26/08	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943
05/18/09	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
08/19/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	<0.000200	0.00135	<0.000200
10/30/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	<0.000200	0.00149	<0.000200
10/13/11	0.000116	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	0.000547	<0.000105
Field Point MW-8	Well Screen Interval (feet): 23.05-38.05												
07/25/06	<0.000939	<0.000939	<0.000939	<0.000188	<0.0000939	<0.0000939	<0.000188	<0.000131	<0.0000939	<0.000188	<0.000188	<0.000469	<0.000188
02/07/07	<0.00104	<0.00521	<0.00104	<0.000208	<0.000104	<0.000104	<0.000208	<0.000146	<0.000104	<0.000208	<0.000208	<0.000521	<0.000208
04/15/08	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962
09/26/08	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980
05/18/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952
08/19/09	<0.00103	<0.00513	<0.00103	<0.000205	<0.000103	<0.000103	<0.000205	<0.000144	<0.000103	<0.000205	<0.000205	0.00101	<0.000205
10/30/09	<0.00100	<0.00500	<0.00100	>0.000200	<0.000100	0.0001	<0.000200	<0.000140	<0.000100	<0.000200	<0.000200	0.0012	<0.000200
Field Point MW-9	Well Screen Interval (feet): 27.64-42.64												
07/21/06	<0.00099	0.001	<0.00099	<0.000198	<0.00099	<0.00099	<0.000198	<0.000139	<0.00099	0.000198	<0.000198	<0.000495	<0.000198
02/06/07	<0.00104	<0.00521	<0.00104	<0.000208	<0.000104	<0.000104	<0.000208	<0.000146	<0.000104	<0.000208	<0.000208	<0.000521	<0.000208
04/15/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971
09/26/08	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-9	Well Screen Interval (feet): 27.64-42.64												
05/18/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952
08/19/09	<0.000971	<0.00485	<0.000971	<0.000194	<0.0000971	<0.0000971	<0.000194	<0.000136	<0.0000971	<0.000194	<0.000194	<0.000485	<0.000194
10/30/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	<0.000200	<0.000500	<0.000200
10/13/11	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	0.000476	<0.0000952
02/22/12	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	0.000295	<0.0000952
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	0.017	0.00713	<0.00377	0.0271	<0.00377	<0.00377	<0.00377	<0.00377	<0.00377	<0.00377	0.005	0.0768	<0.00377
Field Point MW-10	Well Screen Interval (feet): 28.08-43.08												
07/21/06	0.001	0.001	0.001	<0.000200	<0.0001	<0.0001	<0.000200	<0.00014	<0.0001	<0.000200	<0.000200	0.000892	<0.000200
02/06/07	<0.00110	<0.00549	<0.00110	<0.000220	<0.000110	<0.000110	<0.000220	<0.000154	<0.000110	<0.000220	<0.000220	0.000831	<0.000220
04/15/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971
09/26/08	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
05/18/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952
08/19/09	<0.000980	<0.00490	<0.000980	<0.000196	<0.0000980	<0.0000980	<0.000196	<0.000137	<0.0000980	<0.000196	<0.000196	<0.000490	<0.000196
11/19/09	<0.00105	<0.00526	<0.00105	<0.000211	<0.000105	<0.000105	<0.000211	<0.000147	<0.000105	<0.000211	<0.000211	0.000683	<0.000211
10/13/11	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	0.000104	<0.0000943
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
05/15/13	<0.0000187	<0.0000374	<0.0000187	<0.0000187	<0.0000187	<0.0000187	<0.000028	<0.0000187	<0.0000187	<0.0000187	<0.0000374	0.00021	<0.0000187
05/15/13 D	0.0000462 J	<0.0000374	0.000024 J	<0.0000187	<0.0000187	<0.0000187	<0.000028	<0.0000187	<0.0000187	<0.0000187	<0.0000374	0.00033	<0.0000187
01/29/14	0.0000594 J	<0.0000282	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000282	0.000258	<0.0000188

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-10	Well Screen Interval (feet): 28.08-43.08												
11/19/14	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00021	<0.0001
11/19/14 D	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	0.00021	<0.000094
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
11/29/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
07/20/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00017 J	<0.00019
Field Point MW-11	Well Screen Interval (feet): 29.00-44.00												
04/30/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971
09/26/08	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962
05/18/09	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943
08/19/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	<0.000200	<0.000500	<0.000200
10/30/09	<0.000990	<0.00495	<0.000990	<0.000198	<0.000099	<0.000099	<0.000198	<0.000139	<0.000099	<0.000198	<0.000198	<0.000495	<0.000198
10/13/11	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	0.000109	<0.000099
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00194	<0.00194	<0.00194	<0.00194	<0.00194	<0.00194	<0.00194	<0.00194	<0.00194	<0.00194	<0.00194	<0.00194	<0.00194
05/15/13	<0.0000187	<0.0000374	<0.0000187	<0.0000187	<0.0000187	<0.0000187	<0.000028	<0.0000187	<0.0000187	<0.0000187	<0.0000374	<0.0000187	<0.0000187
01/28/14	<0.0000188	<0.0000282	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000188	<0.0000188
06/18/14	<0.0000191	<0.0000287	<0.0000287	<0.0000191	<0.0000191	<0.0000191	<0.0000191	<0.0000191	<0.0000191	<0.0000191	<0.0000287	<0.0000191	<0.0000191
11/19/14	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952
04/27/16	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-11	Well Screen Interval (feet): 29.00-44.00												
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
11/29/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00015 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00022	<0.00019
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-12	Well Screen Interval (feet): 30.00-45.00												
04/30/08	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
09/26/08	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943
05/19/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952
08/19/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	0.000145	<0.000200	0.00136 R1	0.00203	<0.000200
10/30/09	<0.00102	<0.00510	<0.00102	<0.000204	<0.000102	<0.000102	<0.000204	<0.000143	<0.000102	<0.000204	0.00270 R1	0.00169	<0.000204
10/13/11	0.000337	0.000149	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	0.00197	<0.000099
02/22/12	0.000123	0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	0.00115	<0.0000943
07/17/12	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	0.00189	<0.00189
Field Point MW-13	Well Screen Interval (feet): 30.00-45.00												
04/30/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971
09/26/08	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980	<0.0980
05/19/09	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476	<0.0476
08/19/09	<0.00103	<0.00513	0.00152 R12	<0.000205	<0.000103	0.000578	0.000915 R1	<0.000144	0.00515	<0.000205	0.0118 R1	0.00424	<0.000205
10/30/09	<0.000971	<0.00485	<0.000971	0.00309 R1	<0.0000971	0.000598 R1	0.00123 R1	<0.000136	0.00642	0.00300 R1	0.0247 R1	0.00331	<0.000194

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-14	Well Screen Interval (feet): 27.00-42.00												
04/30/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971
09/26/08	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980
05/19/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952
08/19/09	<0.000971	<0.00485	<0.000971	<0.000194	<0.0000971	<0.0000971	<0.000194	<0.000136	<0.0000971	<0.000194	<0.000194	0.000797	<0.000194
10/30/09	<0.00100	<0.00500	<0.00100	<0.000200	0.000172	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	0.00165 R1	0.00123	<0.000200
10/13/11	0.0002	<0.0000952	0.000429	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	0.00114	<0.0000952
02/22/12	0.000222	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	<0.000111	0.0013	<0.000111
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	0.00189	<0.00189
Field Point MW-15	Well Screen Interval (feet): 29.00-44.00												
04/30/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971
09/26/08	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980
05/19/09	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105	<0.0105
08/19/09	<0.00103	<0.00513	<0.00103	<0.000205	<0.000103	<0.000103	<0.000205	<0.000144	0.000857	<0.000205	0.00315 R1	0.00229	<0.000205
10/30/09	<0.000980	<0.00490	<0.000980	0.00384 R1	<0.000098	0.000723 R1	0.00128 R1	0.00191 R1	0.00786	0.00345 R1	0.0300 R1	0.00380	<0.000196
Field Point MW-16	Well Screen Interval (feet): 26.50-41.50												
04/30/08	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103
09/26/08	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943
05/18/09	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943
08/19/09	<0.00103	<0.00513	<0.00103	<0.000205	<0.000103	<0.000103	<0.000205	<0.000144	<0.000103	<0.000205	<0.000205	0.00109	<0.000205

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHs
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-16	Well Screen Interval (feet): 26.50-41.50												
10/13/11	0.000238	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	0.0017	<0.0000952
02/22/12	0.000217	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	0.00153	<0.0000943
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	0.00189	<0.00189
Field Point MW-17	Well Screen Interval (feet): 29.50-44.50												
08/19/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	0.000315	0.00144	<0.000200
10/30/09	<0.00100	<0.00500	<0.00100	<0.000200	0.000774 R1	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	0.00290 R1	0.00180	<0.000200
10/13/11	0.000307	0.000515	0.0016	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	0.00178	<0.000099
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189
11/29/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0016	<0.00019
07/18/18	0.000077 J	0.00011 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0015	<0.00019
Field Point MW-18	Well Screen Interval (feet): 27.00-42.00												
08/19/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	0.000423	0.00120	<0.000200
10/30/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	0.000767 R1	<0.000200	0.00281 R1	0.00202	<0.000200
10/13/11	0.000467	0.000133	0.000114	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	0.000143	<0.0000952	<0.0000952	0.00239	<0.0000952
Field Point MW-19	Well Screen Interval (feet): 27.00-42.00												
08/19/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	<0.000200	<0.000500	<0.000200
10/30/09	<0.00102	<0.00510	<0.00102	<0.000204	<0.000102	<0.000102	<0.000204	<0.000143	<0.000102	<0.000204	<0.000204	<0.000510	<0.000204
10/13/11	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-19	Well Screen Interval (feet): 27.00-42.00												
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	0.00189	<0.00189
05/15/13	<0.0000189	<0.0000377	<0.0000189	<0.0000189	<0.0000189	<0.0000189	<0.0000283	<0.0000189	<0.0000189	<0.0000189	<0.0000377	<0.0000189	<0.0000189
01/29/14	<0.0000188	<0.0000282	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000188	<0.0000188
06/18/14	<0.00002	<0.00003	<0.00003	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00003	<0.00002	<0.00002
11/18/14	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096
12/09/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	0.000153	<0.0000952
04/27/16	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	0.000198	<0.0000939
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
11/29/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00068	<0.00019
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-20	Well Screen Interval (feet): 29.50-44.50												
08/19/09	<0.000971	<0.00485	<0.000971	<0.000194	<0.0000971	<0.0000971	<0.000194	<0.000136	<0.0000971	<0.000194	<0.000194	<0.000485	<0.000194
10/30/09	<0.000952	<0.00476	<0.000952	<0.000190	<0.0000952	<0.0000952	<0.000190	<0.000133	<0.0000952	<0.000190	<0.000190	<0.000476	<0.000190
10/13/11	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099
02/22/12	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189
05/15/13	<0.0000187	<0.0000374	<0.0000187	<0.0000187	<0.0000187	<0.0000187	<0.000028	<0.0000187	<0.0000187	<0.0000187	<0.0000374	<0.0000187	<0.0000187
01/29/14	<0.0000188	<0.0000282	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000188	<0.0000188

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-20	Well Screen Interval (feet): 29.50-44.50												
06/18/14	<0.0000192	<0.0000288	<0.0000288	<0.0000192	<0.0000192	<0.0000192	<0.0000192	<0.0000192	<0.0000192	<0.0000192	<0.0000288	<0.0000192	<0.0000192
11/18/14	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Field Point MW-21	Well Screen Interval (feet): 29.50-44.50												
08/19/09	<0.000980	<0.00490	<0.000980	<0.000196	<0.0000980	<0.0000980	<0.000196	<0.000137	<0.0000980	<0.000196	<0.000196	<0.000490	<0.000196
10/30/09	<0.00100	<0.00500	<0.00100	<0.000200	<0.000100	<0.000100	<0.000200	<0.000140	<0.000100	<0.000200	<0.000200	<0.000500	<0.000200
10/13/11	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	0.00189	<0.00189
05/15/13	<0.0000189	<0.0000377	<0.0000189	<0.0000189	<0.0000189	<0.0000189	<0.0000283	<0.0000189	<0.0000189	<0.0000189	<0.0000377	<0.0000189	<0.0000189
01/29/14	<0.0000188	<0.0000282	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000188	<0.0000188
06/18/14	<0.0000190	<0.0000284	<0.0000284	<0.0000190	<0.0000190	<0.0000190	<0.0000190	<0.0000190	<0.0000190	<0.0000190	<0.0000284	<0.0000190	<0.0000190
11/18/14	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952
04/27/16	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935
Field Point MW-22	Well Screen Interval (feet): 30.00-45.00												
10/30/09	<0.00102	<0.00510	<0.00102	<0.000204	<0.000102	<0.000102	<0.000204	<0.000143	<0.000102	<0.000204	<0.000204	<0.000510	<0.000204
10/13/11	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
02/22/12	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-22	Well Screen Interval (feet): 30.00-45.00												
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189
05/15/13	<0.0000187	<0.0000374	<0.0000187	<0.0000187	<0.0000187	<0.0000187	<0.000028	<0.0000187	<0.0000187	<0.0000187	<0.0000374	<0.0000187	<0.0000187
01/29/14	<0.0000188	<0.0000282	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000188	<0.0000188
06/18/14	<0.0000194	<0.0000291	<0.0000291	<0.0000194	<0.0000194	<0.0000194	<0.0000194	<0.0000194	<0.0000194	<0.0000194	<0.0000291	<0.0000194	<0.0000191
11/19/14	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952
04/27/16	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
11/29/17	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-23	Well Screen Interval (feet): 31.00-46.00												
02/22/12	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192	<0.00192
05/15/13	<0.000019	<0.0000381	<0.000019	<0.000019	<0.000019	<0.000019	<0.0000286	<0.000019	<0.000019	<0.000019	<0.0000381	<0.000019	<0.000019
01/29/14	<0.0000188	<0.0000282	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	0.0000932 J	<0.0000188	<0.0000188
06/18/14	<0.0000204	<0.0000306	<0.0000306	<0.0000204	<0.0000204	<0.0000204	<0.0000204	<0.0000204	<0.0000204	<0.0000204	<0.0000306	<0.0000204	<0.0000204
11/18/14	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095
12/08/15	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	<0.000190	0.000220	<0.000190
04/27/16	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	0.000280	<0.0000939

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHs
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-25	Well Screen Interval (feet): 28.00-43.00												
02/22/12	0.000168	0.000179	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	<0.000105	0.00232	<0.000105
Field Point MW-26	Well Screen Interval (feet): 30.00-45.00												
02/22/12	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	<0.00189	0.00189	<0.00189
05/15/13	<0.0000187	<0.0000374	<0.0000187	<0.0000187	<0.0000187	<0.0000187	<0.000028	<0.0000187	<0.0000187	<0.0000187	<0.0000374	<0.0000187	<0.0000187
01/29/14	<0.0000188	<0.0000282	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000188	<0.0000188
06/18/14	<0.0000189	<0.0000283	<0.0000283	<0.0000189	<0.0000189	<0.0000189	<0.0000189	<0.0000189	<0.0000189	<0.0000189	<0.0000283	<0.0000189	<0.0000189
11/19/14	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952
04/27/16	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
11/29/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-27	Well Screen Interval (feet): 35.00-50.00												
07/19/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-28	Well Screen Interval (feet): 35.00-50.00												
07/19/18	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHs
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point MW-29 07/19/18	Well Screen Interval (feet): 35.00-50.00 <0.00019			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-30 07/19/18	Well Screen Interval (feet): 35.00-50.00 <0.00020			<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Field Point MW-31 07/19/18	Well Screen Interval (feet): 35.00-50.00 <0.00019			<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.00017 J	<0.00019
Field Point MW-32 07/19/18	Well Screen Interval (feet): 35.00-50.00 <0.00020			<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Field Point SB-1GW 10/28/11	Grab Groundwater Sample <0.0000962			<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962	<0.0000962
Field Point SB-2GW 10/28/11	Grab Groundwater Sample <0.0000971			<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	0.00034	<0.0000971
Field Point SB-3GW 10/28/11	Grab Groundwater Sample 0.0005			<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	0.00165	<0.000098
Field Point SB-4GW 10/28/11	Grab Groundwater Sample <0.000098			<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	0.000216	<0.000098

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHs
Gladiola Station
Lea County, New Mexico
Cardno 3612

Date	Acenaphthene (mg/l)	Acenaphthylene (mg/l)	Anthracene (mg/l)	Benzo(a)anthracene (mg/l)	Benzo(a)pyrene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(g,h,i)perylene (mg/l)	Benzo(k)fluoranthene (mg/l)	Chrysene (mg/l)	Dibenz(a,h)anthracene (mg/l)	Fluoranthene (mg/l)	Fluorene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	0.0007	NA	NA	NA	NA	NA	NA	NA	NA
Field Point SB-5GW 10/28/11	Grab Groundwater Sample 0.000137	0.000304	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	<0.000098	0.000725	<0.000098
Field Point SB-6GW 10/28/11	Grab Groundwater Sample <0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971
Field Point SB-7GW 10/28/11	Grab Groundwater Sample 0.000184	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	0.000495	<0.0000971

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHs
 Gladiola Station
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Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-1	Well Screen Interval (feet): 22.71-42.71					
07/24/06	0.00434	0.0246	0.0639 (a)	0.194	0.109	0.3669
02/08/07	0.0489	0.0493	0.139 (a)	0.178	0.300	0.6170
09/26/08	<0.0100	<0.0100	0.0553	0.0400	0.0522	0.1475
05/19/09	<0.0100	<0.0100	0.0461	0.0313	0.0403	0.1177
08/19/09	1.620 R1	1.470 R1	0.627 (c)	3.940 R1	1.940	6.507 R1
10/30/09	0.0132 R1	0.00554 R1	0.0746 (c)	0.118 R1	0.0573	0.250 R1
10/12/11	<0.0000952	<0.0000952				
Field Point MW-2	Well Screen Interval (feet): 27.59-47.59					
07/25/06	0.0603	0.0333	0.0211 (a)	0.163	0.0696	0.2537
02/08/07	0.232	0.075	0.0208 (a)	0.258	0.238	0.5168
09/26/08	<0.0971	<0.0971	0.117	0.201	0.287	0.0484
08/19/09	1.660 R1	1.410 R1	0.730 (c)	5.070 R1	2.750	8.550 R1
10/30/09	0.0382 R1	0.0545 R1	0.0514 (c)	0.0975 R1	0.0781	0.227 R1
Field Point MW-3	Well Screen Interval (feet): 24.20-44.20					
07/24/06	0.0357	0.0182	0.0315 (a)	0.161	0.0752	0.2677
02/08/07	0.191	0.0557	0.053 (a)	0.220	0.255	0.5280
09/26/08	<0.0105	<0.0105	0.0146	0.0154	0.0162	0.0462
05/19/09	<0.0105	<0.0105	0.0164	0.0199	0.0215	0.0578
08/19/09	0.146 R1	0.161 R1	0.0353 R1 (c)	0.245	0.0885	0.3688 R1
10/30/09	0.0451 R1	0.0738 R1	0.00943 (c)	0.153 R1	0.0482	0.211 R1
Field Point MW-4	Well Screen Interval (feet): 23.97-38.97					
07/25/06	<0.000469	<0.000188	0.0227 (a)	0.0373	0.0286	0.0886
02/07/07	0.00901	0.0117	0.027 (a)	0.0553	0.147	0.2293
04/15/08	<0.00990	<0.00990	0.0406	0.0320	0.0428	0.1154
09/26/08	<0.00980	<0.00980	0.0397	0.0271	0.0392	0.1060
05/19/09	<0.0526	<0.0526	<0.0526	<0.0526	<0.0526	<0.1578

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-4						
	Well Screen Interval (feet): 23.97-38.97					
08/19/09	0.0143 R1	0.00854 R1	0.0369 (c)	0.0578	0.0509	0.1456
10/30/09	0.0949 R1	0.158 R1	0.0645 (c)	0.311 R1	0.163	0.539 R1
Field Point MW-5						
	Well Screen Interval (feet): 27.19-47.19					
07/20/06	0.00483	<0.000189	0.0589 (a)	0.0914	0.0563	0.2066
02/07/07	0.0075	0.0037	0.117 (a)	0.105	0.218	0.4400
04/15/08	<0.00990	<0.00990	0.0693	0.0451	0.0547	0.1691
09/26/08	<0.0962	<0.0962	0.074	0.0443	0.605	0.1671
05/19/09	<0.0526	<0.0526	0.0873	0.0573	0.0676	0.2122
08/19/09	0.0194 R1	0.00619 R1	0.105 (c)	0.189 R1	0.103	0.397
08/19/09 D	0.0192 R1	0.00682 R1	0.0954 (c)	0.171 R1	0.0707	0.3371 R1
10/30/09	0.0127 R1	0.00378 R1	0.0191 (c)	0.0375 R12	0.0641	0.121 R12
10/12/11	0.00146	0.000111	0.0402 (b)	0.0216	0.0287	0.0905
07/17/12	<0.00190	<0.00190	0.0558	0.0229	0.0248	0.1035
07/17/12 D	0.00214	<0.00190	0.0568	0.0245	0.0270	0.1083
10/03/12	0.00241	<0.00196	0.0771	0.0296	0.0310	0.1377
10/03/12 D	0.00218	<0.00189	0.0833	0.0265	0.0299	0.1397
Field Point MW-6						
	Well Screen Interval (feet): 27.05-42.05					
07/21/06	<0.000472	<0.000189	<0.000943 (a)	<0.000943	0.00641	0.006410
02/07/07	<0.000556	<0.000222	<0.00111 (a)	<0.00111	<0.00111	<0.00333
04/15/08	<0.00990	<0.00990	<0.00990	<0.00990	<0.00990	<0.02970
09/26/08	<0.0962	<0.0962	<0.00943	<0.00943	<0.00943	<0.02829
05/18/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.02856
08/19/09	<0.000500	<0.000200	<0.00100 (c)	<0.00100	<0.00100	<0.00300
11/19/09	<0.000490	<0.0.000196	<0.000980	<0.000980	<0.000980	BDL
10/13/11	<0.0000962	<0.0000962				
07/17/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
10/03/12	<0.00189	<0.00189	<0.00500	<0.00189	<0.00189	<0.00500

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 Lea County, New Mexico
 Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-6						
Well Screen Interval (feet): 27.05-42.05						
05/15/13	0.0000764 J	<0.0000561	0.0000629 J	<0.00000935	<0.00000935	0.0000629 J
01/28/14	0.0000523 J	<0.0000188	0.0000523 J	<0.0000188	<0.0000282	0.0000993
06/18/14	0.0000518 J	<0.000019	0.000634	0.000239 B	0.000355 B	0.001228 B
11/19/14	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0002856
04/26/16	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0002856
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00038
11/29/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
07/20/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-7						
Well Screen Interval (feet): 24.35-39.35						
07/25/06	<0.000469	<0.000188	0.00383 (a)	0.00855	0.00879	0.02117
02/07/07	<0.000543	<0.000217	0.00284 (a)	0.0215	0.0150	0.03934
04/15/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.02913
09/26/08	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.02829
05/18/09	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0300
08/19/09	<0.000500	0.000665	0.00227 (c)	0.00400	<0.00100	0.00627
10/30/09	<0.000500	0.000609 R1	<0.00100 (c)	0.00873 R1	0.00372	0.0125 R1
10/13/11	0.000147	<0.000105	0.000537	0.000611	0.000558	0.001706
Field Point MW-8						
Well Screen Interval (feet): 23.05-38.05						
07/25/06	<0.000469	<0.000188	<0.000939 (a)	0.00472	<0.000939	0.004720
02/07/07	<0.000521	<0.000208	<0.00104 (a)	0.0201	0.0113	0.03140
04/15/08	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.02886
09/26/08	<0.00980	<0.00980	<0.00980	<0.00980	<0.00980	<0.02940
05/18/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.02856
08/19/09	<0.000513	0.000657	<0.00103 (c)	0.00674 R1	0.00354 R1	0.01028 R1
10/30/09	0.0005	0.000518	<0.00100 (c)	0.0101 R1	0.00430	0.0144 R1

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CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
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 Lea County, New Mexico
 Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-9						
	Well Screen Interval (feet): 27.64-42.64					
07/21/06	<0.000495	<0.000198	<0.00099 (a)	<0.00099	<0.00099	<0.00297
02/06/07	<0.000521	<0.000208	<0.00104 (a)	0.0148	0.00424	0.01904
04/15/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.02913
09/26/08	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.02886
05/18/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.02856
08/19/09	<0.000485	<0.000194	<0.000971 (c)	<0.000971	<0.000971	<0.002913
10/30/09	<0.000500	0.00101	<0.00100 (c)	<0.00100	<0.00100	BDL
10/13/11	<0.0000952	<0.0000952	<0.000952	<0.000952	<0.000952	<0.000952
02/22/12	<0.0000952	<0.0000952	0.00143	<0.000952	<0.000952	0.00143
07/17/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
10/03/12	0.0941	0.00931	0.0676	0.537	0.795	1.3996
Field Point MW-10						
	Well Screen Interval (feet): 28.08-43.08					
07/21/06	<0.0005	<0.000200	<0.001 (a)	0.001	0.001	0.001
02/06/07	<0.00549	<0.000220	<0.00110 (a)	<0.00110	<0.00110	<0.00330
04/15/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.02913
09/26/08	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.0300
05/18/09	<0.00952	<0.00952	<0.00952	<0.00952	<0.00952	<0.02856
08/19/09	<0.000490	<0.000196	<0.000980 (c)	<0.000980	0.00268	0.00268
11/19/09	<0.000526	0.000935 R1	<0.00105 (c)	0.0202 R1	0.0142 R1	0.0344 R1
10/13/11	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.0000943	<0.000943
07/17/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
10/03/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
05/15/13	0.0000876 J	<0.0000561	0.0000706 J	<0.0000935	<0.0000935	0.0000706 J
05/15/13 D	<0.0000561	<0.0000561	0.0000757 J	<0.0000935	<0.0000935	0.0000757 J
01/29/14	<0.0000282	<0.0000188	0.0000594 J	<0.0000188	<0.0000282	0.0000594 J
11/19/14	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
11/19/14 D	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00038

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-10	Well Screen Interval (feet): 28.08-43.08					
11/29/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
07/20/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-11	Well Screen Interval (feet): 29.00-44.00					
04/30/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.02913
09/26/08	<0.00962	<0.00962	<0.00962	<0.00962	<0.00962	<0.02886
05/18/09	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.02829
08/19/09	<0.000500	<0.000200	<0.00100 (c)	<0.00100	0.00334	0.00334
10/30/09	<0.000495	<0.000198	<0.00099 (c)	<0.00099	<0.00099	BDL
10/13/11	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099
07/17/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
10/03/12	<0.00194	<0.00194	<0.00500	<0.00194	<0.00194	<0.00500
05/15/13	<0.0000561	<0.0000561	0.0000534 J	<0.00000935	<0.00000935	0.0000534 J
01/28/14	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000282
06/18/14	<0.0000287	<0.0000191	0.000425	<0.0000191	<0.0000287	0.000425
11/19/14	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0002856
04/27/16	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0002817
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.000187
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00038
11/29/17	0.00033	<0.00019	0.00022	0.0010	0.0013	0.00252
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-12	Well Screen Interval (feet): 30.00-45.00					
04/30/08	<0.010	<0.010	0.0327	0.0316	0.0241	0.0884
09/26/08	<0.00943	<0.00943	0.0909	0.0512	0.0613	0.2034
05/19/09	<0.00952	<0.00952	0.0726	0.0434	0.0534	0.1694
08/19/09	<0.000500	<0.000200	0.12 (c)	0.159 R1	0.0808	0.3598 R1
10/30/09	0.0111 R1	0.00257 R1	0.0236 (c)	0.0283 R1	0.0708	0.123 R1

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 Lea County, New Mexico
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Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-12	Well Screen Interval (feet): 30.00-45.00					
10/13/11	0.00165	<0.000099	0.0879	0.0406	0.063	0.1915
02/22/12	0.000991	<0.0000943	0.0659	0.0244	0.0396	0.1299
07/17/12	<0.002	<0.002	0.0653	0.0357	0.0394	0.1404
10/03/12	<0.00189	<0.00189	0.129	0.0464	0.0602	0.2356
Field Point MW-13	Well Screen Interval (feet): 30.00-45.00					
04/30/08	<0.00971	<0.00971	0.0366	0.0279	0.0329	0.0974
09/26/08	<0.0980	<0.0980	0.0986	<0.00980	<0.00980	0.0986
05/19/09	<0.0476	<0.0476	0.121	0.0712	0.0888	0.281
08/19/09	0.0458 R1	0.0277 R1	0.120 (c)	0.291 R1	0.147	0.558 R1
10/30/09	0.0238 R1	0.0369 R1	0.0212 (c)	0.0325 R1	0.0743	0.128 R1
Field Point MW-14	Well Screen Interval (feet): 27.00-42.00					
04/30/08	<0.00971	<0.00971	<0.00971	<0.00971	<0.00971	<0.02913
09/26/08	<0.00980	<0.00980	0.0120	0.0103	0.0108	0.0331
05/19/09	<0.00952	<0.00952	0.00956	<0.00952	<0.00952	0.00956
08/19/09	0.00411 R1	0.00109	0.00923 (c)	0.0547 R1	0.0172	0.08113 R1
10/30/09	0.00441 R1	0.00135 R1	0.00998 (c)	0.0506 R1	0.0186	0.0792 R1
10/13/11	0.000381	<0.0000952	0.00579	0.00459	0.00418	0.01456
02/22/12	0.000644	<0.000111	0.0071	0.00479	0.00428	0.01617
07/17/12	<0.00190	<0.00190	0.0137	0.00521	0.005	0.02391
10/03/12	<0.00189	<0.00189	0.0118	0.00625	0.0072	0.02525
Field Point MW-15	Well Screen Interval (feet): 29.00-44.00					
04/30/08	<0.00971	<0.00971	0.0367	0.0318	0.0395	0.108
09/26/08	<0.00980	<0.00980	0.0902	0.0636	0.0825	0.2363
05/19/09	<0.0105	<0.0105	0.0658	0.0380	0.0484	0.1522
08/19/09	0.0196 R1	0.00753 R1	0.1690 (c)	0.202 R1	0.118	0.489 R1
10/30/09	0.0282 R1	0.0435 R1	0.0274 (c)	0.0407 R1	0.0225	0.0906 R1

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Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-16	Well Screen Interval (feet): 26.50-41.50					
04/30/08	<0.0103	<0.0103	<0.0103	<0.0103	<0.0103	<0.0309
09/26/08	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.02829
05/18/09	<0.00943	<0.00943	<0.00943	<0.00943	<0.00943	<0.02829
08/19/09	<0.000513	0.000979 R1	0.00429 R1 (c)	0.00603 R10	0.0127 R1	0.02302 R10, R1
10/13/11	0.000343	<0.0000952	0.00154	0.00158	0.00124	0.00436
02/22/12	0.000292	<0.0000943	0.00122	0.00113	0.00090	0.003245
07/17/12	<0.00190	<0.00190	<0.00500	0.00229	<0.00190	0.00229
10/03/12	<0.00189	<0.00189	0.00855	0.00429	<0.00189	0.01284
Field Point MW-17	Well Screen Interval (feet): 29.50-44.50					
08/19/09	0.0102 R1	<0.000200	0.134 (c)	0.188 R1	0.0768	0.3988 R1
10/30/09	0.0121 R1	0.00284 R1	0.134 (c)	0.193 R1		0.327 R1
10/13/11	<0.000099	<0.000099	0.0798	0.0364	0.0556	0.1718
07/17/12	<0.00190	<0.00190	0.0429	0.0256	0.0306	0.0991
10/03/12	<0.00189	<0.00189	0.0865	0.0325	0.0402	0.1592
11/29/17	0.0013	<0.00019	0.044	0.022	0.028	0.094
07/18/18	0.00073	<0.00019	0.053	0.026	0.028	0.107
Field Point MW-18	Well Screen Interval (feet): 27.00-42.00					
08/19/09	0.0104 R1	0.000948	0.0213 (c)	0.141 R1	0.0193	0.1816 R1
10/30/09	0.0129 R1	0.00257 R1	0.110 (c)	0.189 R1	0.0696	0.369 R1
10/13/11	0.00246	<0.0000952	0.0414	0.0292	0.0431	0.1137
Field Point MW-19	Well Screen Interval (feet): 27.00-42.00					
08/19/09	<0.000500	<0.000200	<0.00100 (c)	<0.00100	<0.00100	<0.00300
10/30/09	<0.000510	<0.000204	<0.00102 (c)	<0.00102	<0.00102	BDL
10/13/11	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971	<0.0000971
07/17/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
10/03/12	<0.00189	<0.00189	<0.00500	<0.00189	<0.00189	<0.00500

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-19						
	Well Screen Interval (feet): 27.00-42.00					
05/15/13	<0.0000566	<0.0000566	<0.0000189	<0.00000943	<0.00000943	<0.0000189
01/29/14	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000282
06/18/14	<0.00003	<0.00002	0.00022 B	<0.00002	<0.00003	0.00022 B
11/18/14	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096
12/09/15	<0.0000952	<0.0000952	0.00156	0.00147	0.000304	0.003334
04/27/16	<0.0000939	<0.0000939	0.000772	0.000582	<0.0000939	0.001354
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.000187
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00038
11/29/17	0.00018 J	<0.00019	0.00045	0.0013	0.00025	0.002
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-20						
	Well Screen Interval (feet): 29.50-44.50					
08/19/09	<0.000485	<0.000194	<0.000971 (c)	<0.000971	<0.000971	<0.002913
10/30/09	<0.000476	<0.000190	<0.000952 (c)	<0.000952	<0.000952	BDL
10/13/11	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099
02/22/12	<0.0000943	<0.0000943	<0.000943	<0.000943	<0.000943	<0.000943
07/17/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
10/03/12	<0.00189	<0.00189	<0.00500	<0.00189	<0.00189	<0.00500
05/15/13	<0.0000561	<0.0000561	<0.0000187	<0.00000935	<0.00000935	<0.0000187
01/29/14	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000282
06/18/14	<0.0000288	<0.0000192	0.000265 B	<0.0000192	<0.0000288	0.000265 B
11/18/14	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Field Point MW-21						
	Well Screen Interval (feet): 29.50-44.50					
08/19/09	<0.000490	<0.000196	<0.000980 (c)	0.00156	<0.000980	0.00156
10/30/09	<0.000500	<0.000200	<0.00100 (c)	<0.00100	<0.00100	BDL
10/13/11	<0.000099	<0.000099	<0.000099	<0.000099	<0.000099	<0.00009
07/17/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
10/03/12	<0.00189	<0.00189	<0.00500	<0.00189	<0.00189	<0.00500

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-21						
	Well Screen Interval (feet): 29.50-44.50					
05/15/13	<0.0000566	<0.0000566	<0.0000189	<0.00000943	<0.00000943	<0.0000189
01/29/14	<0.0000282	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000282
06/18/14	<0.0000284	<0.0000190	0.000155 B	<0.000019	<0.0000284	0.000155 B
11/18/14	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094	<0.000094
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0002856
04/27/16	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0002817
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.000187
Field Point MW-22						
	Well Screen Interval (feet): 30.00-45.00					
10/30/09	<0.000510	<0.000204	<0.00102 (c)	<0.00102	<0.00102	BDL
10/13/11	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
02/22/12	<0.0000943	<0.0000943	<0.0001	<0.0001	<0.0001	<0.0001
07/17/12	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190	<0.00190
10/03/12	<0.00189	<0.00189	<0.00500	<0.00189	<0.00189	<0.00500
05/15/13	<0.0000561	<0.0000561	<0.0000187	<0.00000935	<0.00000935	<0.0000187
01/29/14	0.0000541 J	<0.0000188	<0.0000188	<0.0000188	<0.0000282	<0.0000188
06/18/14	<0.0000291	<0.0000194	0.000278 B	<0.0000194	<0.0000291	0.000278 B
11/19/14	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097	<0.000097
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0002856
04/27/16	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0000939	<0.0002817
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.000187
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00038
11/29/17	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-23						
	Well Screen Interval (feet): 31.00-46.00					
02/22/12	<0.0000943	<0.0000943	<0.0001	<0.0001	<0.0001	<0.0001
07/17/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
10/03/12	<0.00192	<0.00192	<0.00500	<0.00192	<0.00192	<0.00500

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-23						
	Well Screen Interval (feet): 31.00-46.00					
05/15/13	<0.0000571	<0.0000571	<0.000019	<0.00000952	<0.00000952	<0.000019
01/29/14	0.0000687 J	0.0000724 J	<0.0000188	<0.0000188	<0.0000282	<0.0000188
06/18/14	<0.0000306	<0.0000204	0.0000606 J B	<0.0000204	<0.0000306	0.0000606 J B
11/18/14	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095
12/08/15	<0.000190	<0.000190	0.0125	0.00669	0.00559	0.02478
04/27/16	0.000177 B	<0.0000939	0.00754	0.00497	0.00409	0.0166
Field Point MW-25						
	Well Screen Interval (feet): 28.00-43.00					
02/22/12	0.0018	<0.000105	0.0939	0.0427	0.0688	0.2054
Field Point MW-26						
	Well Screen Interval (feet): 30.00-45.00					
02/22/12	<0.0000952	<0.0000952	<0.0001	<0.0001	<0.0001	<0.0001
07/17/12	<0.00190	<0.00190	<0.00500	<0.00190	<0.00190	<0.00500
10/03/12	<0.00189	<0.00189	<0.00500	<0.00189	<0.00189	<0.00500
05/15/13	<0.0000561	<0.0000561	<0.0000187	<0.00000935	<0.00000935	<0.0000187
01/29/14	<0.0000282	<0.0000188	0.0000818 J	0.000048 J	<0.0000282	0.0001298
06/18/14	<0.0000283	<0.0000189	0.000394 B	<0.0000189	<0.0000283	0.000391 B
11/19/14	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
12/08/15	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0000952	<0.0002856
04/27/16	<0.0000939	<0.0000939	0.000370	0.000130	0.0000991	0.0005991
10/25/16	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.0000935	<0.000187
05/24/17	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00038
11/29/17	<0.00019	<0.00019	0.00020	0.00018 J	0.00015 J	0.00053
07/18/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-27						
	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point MW-28	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Field Point MW-29	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-30	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Field Point MW-31	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019
Field Point MW-32	Well Screen Interval (feet): 35.00-50.00					
07/19/18	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Field Point SB-1GW	Grab Groundwater Sample					
10/28/11	0.000452	<0.0000962	0.000115	0.000462	0.000144	0.000721
Field Point SB-2GW	Grab Groundwater Sample					
10/28/11	0.000359	<0.0000971	0.00922	0.00625	0.00883	0.0243
Field Point SB-3GW	Grab Groundwater Sample					
10/28/11	0.00168	<0.000098	0.0835	0.039	0.0606	0.1831
Field Point SB-4GW	Grab Groundwater Sample					
10/28/11	0.000363	<0.000098	0.0137	0.0084	0.00967	0.03177
Field Point SB-5GW	Grab Groundwater Sample					
10/28/11	0.000559	<0.000098	0.0499	0.0182	0.0269	0.095

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHs
Gladiola Station
Lea County, New Mexico
Cardno 3612

Date	Phenanthrene (mg/l)	Pyrene (mg/l)	Naphthalene (mg/l)	1-Methylnaphthalene (mg/l)	2-Methylnaphthalene (mg/l)	Total Naphthalene (mg/l)
NMED WQCC HHS	NA	NA	NA	NA	NA	0.03
Field Point SB-6GW	Grab Groundwater Sample					
10/28/11	0.0000971	<0.0000971	0.000505	0.000291	0.000437	0.001233
Field Point SB-7GW	Grab Groundwater Sample					
10/28/11	0.000495	<0.0000971	0.0047	0.00281	0.00367	0.01118

TABLE 5
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR PAHS
Gladiola Station
Lea County, New Mexico
Cardno 3612

Notes: Data collected prior to December 8, 2015 provided by AECOM.
ELEV = Elevation.
GW = Groundwater.
NAPL = Non-aqueous phase liquid.
Groundwater elevations are adjusted for NAPL thickness using a relative density of 0.83.
NMED WQCC HHS = New Mexico Environmental Department Water Quality Control Commission Human Health Standard for groundwater with 10,000 mg/l TDS or less.
Bolded values equal or exceed applicable regulatory limits.
Naphthalene is analyzed by EPA Method 8270C unless otherwise noted.
Total naphthalenes are the sum of 1- and 2-methylnaphthalene and naphthalene.
TDS = Total dissolved solids.
mg/l = Milligrams per liter.
BDL = Below laboratory detection limits.
< = Not detected at or above stated laboratory reporting limit.
A-01 = Could not obtain constant weight.
D = Duplicate sample.
J = Estimated value between method detection limit and practical quantitation limit.
R1 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the higher value was reported.
R10 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported due to apparent chromatographic problems.
R12 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported.
X = Pre-purge/no-purge sample.
(a) = Analyzed by EPA Method 8310.
(b) = Analyzed by EPA Method 8260B.
(c) = Analyzed method unknown.
(d) = Analyzed to determine the presense of NAPL.

TABLE 6
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-1	Well Screen Interval (feet): 22.71-42.71											
07/24/06	0.0295	4.82	0.0018	0.0126	<0.00500	0.000303	<0.0100	<0.00500	10.9	1.82	743	900
02/08/07	0.0304	5.02	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	2.8	1.24	621	<100
09/21/08	0.0256	7.52	0.0011	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	1.63	1.28	913	
05/19/09	0.0265	8.72	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	2.41	<1.00	952	962
08/19/09	0.0303	7	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	2.25	<1.00	979	940
10/30/09	0.0246	8.54	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	2.83	3.54	917	780
Field Point MW-2	Well Screen Interval (feet): 27.59-47.59											
07/25/06	0.0469	0.958	0.0021	0.0140	<0.00500	<0.000200	<0.0100	0.0057	30.6	2.11	668	900
02/08/07	0.0348	0.764	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	32	3.9	634	440
09/22/08	0.0352	0.823	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	29.4	3.57	669	622
08/19/09	0.0393	0.901	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	31.2	2.74	649	742
10/30/09	0.0208	8.57	<0.00100	<0.00500	<0.00500	0.0002	<0.0100	0.005	15.1	1.08	752	480
Field Point MW-3	Well Screen Interval (feet): 24.20-44.20											
07/24/06	0.057	3.33	0.0015	0.0098	<0.00500	<0.000200	<0.0100	<0.00500	21.2	8.35	773	880
02/08/07	0.0505	3.44	<0.00100	<0.00500	0.0052	<0.000200	<0.0100	<0.00500	31.6	33.4	708	540
09/22/08	0.0380	6.09	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	26.7	2.64	876	744
05/19/09	0.0397	6.14	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	23.7	2.66	883	858
08/19/09	0.0302	6.56	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	28.4	<1.00	880	802
10/30/09	0.0316	5.91	<0.00100	<0.00500	<0.00500	0.0002	<0.0100	<0.00500	21.4	<1.00	842	670
Field Point MW-4	Well Screen Interval (feet): 23.97-38.97											
07/25/06	0.034	7.34	0.0016	0.0122	<0.00500	<0.000200	<0.0100	<0.00500	20.7	<1.00	850	1000
02/07/07	0.0617	8.00	<0.00100	0.0615	0.0201	<0.000200	<0.0100	<0.00500	15.1	1.09	2290	<100
04/15/08	0.0140	7.47	0.0011	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	10.2	<1.00	1060	1180
09/21/08	0.0156	7.74	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	17.7	1.31	792	774
05/19/09	0.0162	8.32	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	18.4	3.08	802	854
08/19/09	0.0133	8.19	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	18.9	<1.00	807	860
10/30/09	0.0224	8.64	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	12.2	<1.00	782	660
Field Point MW-5	Well Screen Interval (feet): 27.19-47.19											
07/20/06	0.0661	1.71	<0.00100	0.177	0.0151	0.000220	<0.0100	<0.00500	6.11	<1.00	1250	712

TABLE 6
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-5	Well Screen Interval (feet): 27.19-47.19											
02/07/07	0.0526	1.96	<0.00100	0.0599	0.0105	<0.000200	<0.0100	<0.00500	6.58	1.56	1130	610
04/15/08	0.0440	3.02	0.0017	0.0167	<0.00500	<0.000200	<0.0100	<0.00500	6.34	<1.00	976	736
09/21/08	0.0370	3.07	0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	6.62	1.54	841	
05/19/09	0.0336	3.49	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	6.81	<1.00	837	792
08/19/09	0.031	3.68	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	7.02	<1.00	856	752
08/19/09 D	0.0322	3.71	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	6.93	<1.00	847	760
10/30/09	0.0284	3.93	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	6.61	<1.00	797	1540
10/12/11	0.0353	4.8	<0.00100	<0.00500	0.007	<0.000200	<0.0100	<0.00500	5.03	1.4		
07/17/12	0.0234	4.9	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.59	1.18	720	753
07/17/12 D	0.0252	5.08	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.42	1.21	721	760
10/03/12	0.0238	4.48	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.46	<1.00	726	740
10/03/12 D	0.0233	4.62	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.47	<1.00	732	749
Field Point MW-6	Well Screen Interval (feet): 27.05-42.05											
07/21/06	<0.0100	0.168	<0.00100	<0.00500	<0.00500	0.000207	<0.0100	<0.00500	6.28	63.2	524	660
02/07/07	0.0397	3.19	<0.00100	0.0822	0.0307	0.00172	<0.0100	<0.00500	6.6	<2.00	2930	325
04/15/08	0.0199	0.610	0.0020	0.0213	0.00805	0.000467	0.0106	<0.00500	5.38	42.7	1650	548
09/21/08	<0.0100	0.0932	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.75	34.5	528	440
05/18/09	<0.0100	0.0991	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.90	37.2	567	234
08/19/09	<0.0100	0.1	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	6.11	33.0	519	568
10/30/09	<0.0100	0.108	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	6.03	31.1	475	470
10/13/11	<0.0100	0.112	<0.00100	<0.00500	0.0057	<0.000200	<0.0100	<0.00500	5	26.3		
07/17/12	<0.0100	0.127	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.23	24.6	452	571
10/03/12	<0.0100	0.121	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.91	26.4	446	566
05/15/13	<0.0047	0.14	<0.000200	<0.0012	0.0135	<0.00015	0.0081 J	<0.0013	4.67	<25	483	625
01/28/14	0.01	0.144	<0.000200	<0.0012	0.0059	<0.00015	<0.0064	<0.0013	5.04	26.2	512	597 B
06/18/14	<0.0072	0.138	0.0006 J	<0.00300	<0.002	<0.00015	<0.00500	<0.0025	5.32 B	26.5	483	615
11/19/14	<0.0100	0.15	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.5	25	470	660
12/08/15	0.0149	0.226	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.56	18.4	502	581
04/26/16	0.0309	0.351	<0.00100	0.364	0.0127	<0.000200	<0.0100	<0.00500	4.87	16.2	520	565
05/24/17	0.0273	0.375	<0.0100	0.00788 J	<0.0100	0.000342	<0.0150	<0.00500	4.6	13	482	545
11/29/17	<0.0100	0.212	<0.0100	<0.0100	<0.0100	<0.000200	<0.0150	<0.00500	13	19	460	570
07/20/18	0.0284	0.288	<0.0100	0.00674 J	0.00430 J	0.000190 B,J	0.0344	<0.00500	4.6	180	430	525

TABLE 6
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-7	Well Screen Interval (feet): 24.35-39.35											
07/25/06	<0.0100	0.679	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	15.5	<1.00	641	800
02/07/07	0.0583	2.46	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	14.4	4.48	654	200
04/15/08	0.0513	3.00	0.0015	0.0051	<0.00500	<0.000200	<0.0100	<0.00500	13.6	1.46	710	744
09/20/08	0.0407	1.92	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	15.3	3.16	680	710 B
05/18/09	0.0395	1.88	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	15.7	3.10	672	748
08/19/09	0.0137	1.86	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	17.2	3.06	673	720
10/30/09	0.0112	2.05	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	16.5	3.26	645	500
10/13/11	0.014	2.34	<0.00100	<0.00500	0.0054	<0.000200	<0.0100	<0.00500	14.5	3.74		
Field Point MW-8	Well Screen Interval (feet): 23.05-38.05											
07/25/06	0.0153	0.328	0.0012	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	13.1	8.01	593	810
02/07/07	0.0342	0.929	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	11.5	22.2	707	510
04/15/08	0.035	1.22	0.0015	0.0078	<0.00500	<0.000200	<0.0100	<0.00500	11.6	7.4	716	688
09/20/08	0.0211	0.773	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	13.5	9.30	633	610
05/18/09	0.0174	0.776	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	11.1	8.68	535	258
08/19/09	<0.0100	1.14	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	13.3	6.57	623	676
10/30/09	<0.0100	1.04	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	14.0	7.46	599	560
Field Point MW-9	Well Screen Interval (feet): 27.64-42.64											
07/21/06	0.0298	0.918	<0.00100	0.0354	0.0078	<0.000200	<0.0100	<0.00500	103	157	1010	900
02/06/07	0.0291	0.284	<0.00100	0.0075	<0.00500	<0.000200	<0.0100	<0.00500	92	89.0	717	1110
04/15/08	0.0694	1.61	0.0023	0.0473	0.0126	<0.000200	<0.0100	<0.00500	85.5	47.5	2410	684
09/21/08	0.0274	0.100	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	73.3	40.7	572	520
05/18/09	0.0234	0.0961	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	61.0	38.3	584	644
08/19/09	0.0185	0.102	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	75.8	37.9	578	744
10/30/09	0.0203	0.0993	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	79.3	39.3	534	610
10/13/11	0.0147	0.122	<0.00100	<0.00500	0.0059	<0.000200	<0.0100	<0.00500	101	27.5		
07/17/12	0.0175	0.0972	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	105	21.8	516	771
10/03/12	0.0277	0.0878	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	105	23		1130
Field Point MW-10	Well Screen Interval (feet): 28.08-43.08											
07/21/06	<0.0100	0.324	<0.00100	0.0136	<0.00500	0.000822	<0.0100	<0.00500	500	85.2	748	1520
02/06/07	<0.0100	0.112	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	6.72	105	602	1630

TABLE 6
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-10	Well Screen Interval (feet): 28.08-43.08											
04/15/08	0.0439	0.981	0.0044	0.0625	0.0277	0.001950	0.0256	<0.00500	439	97.4	3250	1530
09/21/08	<0.0100	0.0858	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	414	79.6	676	1000
05/18/09	<0.0100	0.0839	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	430	74.1	675	1490
08/19/09	<0.0100	0.0763	<0.00100	<0.00500	<0.00500	0.000818	<0.0100	<0.00500	421	80.8	660	1510
10/30/09	<0.0100	0.0781	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	394	89.7	614	1370
10/13/11	<0.0100	0.0656	<0.00100	<0.00500	0.0057	0.000998	<0.0100	<0.00500	356	91.7		
07/17/12	0.0108	0.0696	<0.00100	<0.00500	<0.00500	0.000338	<0.0100	<0.00500	283	94.0	577	1400
10/03/12	<0.0100	0.0672	<0.00100	<0.00500	<0.00500	0.00106	<0.0100	<0.00500	259	99.2	595	1450
05/15/13	0.0055 J	0.0677	<0.000200	<0.0012	0.0113	<0.00015	<0.0064	<0.0013	218	95.9	585	1400
05/15/13 D	0.0091 J	0.0703	<0.000200	<0.0012	0.0104	<0.00015	0.0115	<0.0013	188	95.6	607	1350
01/29/14	0.0066 J	0.0632	<0.000200	<0.0012	<0.0035	<0.00015	<0.0064	<0.0013	161	88.7	666	1220 B
11/19/14	<0.0100	0.059	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	170	92	590	1300
11/19/14 D	<0.0100	0.061	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	170	88	600	1300
05/24/17	0.00638 J	0.188	<0.0100	0.00742 J	<0.0100	0.00481	<0.0150	0.00162 J	130	69	636	1080
11/29/17	0.0294	0.321	<0.0100	0.0154	<0.0100	0.00319	0.0184	<0.00500	130	67	691	1080
07/20/18	<0.0100	0.0986	<0.0100	0.00305 J	0.00666 J	0.000779 B	0.0235	<0.00500	140	100	600	1110
Field Point MW-11	Well Screen Interval (feet): 29.00-44.00											
04/30/08	<0.0100	0.159	<0.00100	<0.00500	<0.00500	0.000224	<0.0100	<0.00500	213	128	528	1120
09/21/08	<0.0100	0.0480	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	524	130	553	1440
05/18/09	<0.0100	0.0562	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	503	125	572	1490
08/19/09	<0.0100	0.0483	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	517	121	577	1550
10/30/09	<0.0100	0.0534	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	502	127	539	1350
10/13/11	<0.0100	0.051	<0.00100	<0.00500	0.005	<0.000200	<0.0100	<0.00500	428	117		
07/17/12	0.0142	0.0531	<0.00100	<0.00500	<0.00500	0.000200	<0.0100	<0.00500	422	124	452	1570
10/03/12	0.0171	0.0551	<0.00100	<0.00500	<0.00500	0.000200	<0.0100	<0.00500	405	121	490	1500
05/15/13	0.0084 J	0.054	<0.000200	<0.0012	0.0138	<0.00015	0.0239	<0.0013	392	123	497	1500
01/28/14	0.0074 J	0.0465	<0.000200	<0.0012	<0.0035	<0.00015	<0.0064	<0.0013	393	122	513	1370
06/18/14	<0.0072	0.0445	0.0007 J	<0.00300	<0.002	<0.00015	<0.00500	<0.0025	351 B	114	485	1340
11/19/14	<0.0100	0.044	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	320	120	480	1400
12/08/15	<0.0100	0.0462	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	272	108	498	1270
04/27/16	<0.0100	0.0458	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	257	99.7	479	1250
10/25/16	<0.0100	0.0427	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	253	<20.0	465	1160

TABLE 6
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-11	Well Screen Interval (feet): 29.00-44.00											
05/24/17	0.00968 J	0.0387	<0.0100	<0.0100	<0.0100	<0.000200	<0.0150	<0.00500	220	120	460	1100
11/29/17	<0.0100	0.0530	<0.0100	0.00570 J	<0.0100	<0.000200	0.0185	0.00189 J	210	110	454	1090
07/18/18	0.00561 J	0.0445	<0.0100	<0.0100	<0.0100	0.000163 B,J	<0.0150	0.00260 J	170	68	440	1040
Field Point MW-12	Well Screen Interval (feet): 30.00-45.00											
04/30/08	0.0278	2.23	<0.00100	0.0132	0.0082	<0.000200	<0.0100	<0.00500	10.7	8.19	995	657
09/21/08	0.0238	5.10	0.00130	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	25.1	1.62	755	708
05/19/09	0.0233	5.82	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	30.3	<1.00	777	2390
08/19/09	0.0177	6.02	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	28.2	<1.00	778	750
10/30/09	0.0196	6.63	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	24.7	<1.00	727	1260
10/13/11	0.01	7.88	<0.00100	<0.00500	0.0063	<0.000200	<0.0100	<0.00500	17.5	1.32		
07/17/12	0.0133	8.44	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	13.4	1.18	707	757
10/03/12	<0.0100	8.32	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	15.3	<1.00	694	724
Field Point MW-13	Well Screen Interval (feet): 30.00-45.00											
04/30/08	0.0221	1.41	<0.00100	0.0134	0.0104	<0.000200	<0.0100	<0.00500	61.9	209	870	1920 A-01
09/21/08	0.0377	3.54	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.62	1.20	751	748
05/19/09	0.0321	4.04	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.99	<1.00	800	252
08/19/09	0.0249	4.44	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.76	<1.00	781	800
10/30/09	0.0275	4.47	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.99	1.4	745	580
Field Point MW-14	Well Screen Interval (feet): 27.00-42.00											
04/30/08	0.0172	0.193	<0.00100	0.0063	<0.00500	<0.000200	<0.0100	<0.00500	5.21	195	780	919
09/21/08	0.0572	0.181	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.71	19.7	647	
05/19/09	0.0159	0.165	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.85	11.2	663	698
08/19/09	0.0271	0.196	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.14	15.7	656	702
10/30/09	0.0261	0.196	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.01	16.7	604	510
10/13/11	0.0325	0.38	<0.00100	<0.00500	0.0058	<0.000200	<0.0100	<0.00500	4.42	17.7		
07/17/12	0.0592	0.318	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	3.82	26.2	582	712
10/03/12	0.0308	0.294	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.47	20.3	593	733
Field Point MW-15	Well Screen Interval (feet): 29.00-44.00											
04/30/08	0.0259	2.16	<0.00100	0.0152	0.0084	<0.000200	<0.0100	0.0065	8.74	31.9	1050	641

TABLE 6
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 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-15	Well Screen Interval (feet): 29.00-44.00											
09/21/08	0.0282	5.87	0.0014	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	10.4	1.02	808	
05/19/09	0.0267	6.47	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	10.0	<1.00	886	850
08/19/09	0.0254	6.05	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	11.6	<1.00	891	850
10/30/09	0.0256	4.5	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.41	<1.00	738	570
Field Point MW-16	Well Screen Interval (feet): 26.50-41.50											
04/30/08	0.0107	1.02	<0.00100	0.0097	0.0058	<0.000200	<0.0100	<0.00500	16.6	52.5	750	726 A-01
09/21/08	0.0153	1.40	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	9.87	3.28	762	716
05/18/09	0.0167	1.59	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	8.84	1.69	783	776
08/19/09	0.0136	1.73	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	9.37	1.67	791	750
10/30/09	0.0136	1.79	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	8.38	1.83	732	410
10/30/09 D	0.0152	2.04	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	8.8	1.51	730	260
10/13/11	0.0142	2.21	0.0051	<0.00500	0.0074	<0.000200	<0.0100	<0.00500	6.19	2.08		
07/17/12	0.0147	1.86	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.83	2.32	726	788
10/03/12	0.0193	1.93	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	7	1.81	721	769
Field Point MW-17	Well Screen Interval (feet): 29.50-44.50											
08/19/09	0.0475	1.98	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	11.7	1.09	748	725
10/30/09	0.0541	1.69	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	11	<1.00	719	210
10/13/11	0.036	3.61	<0.00100	<0.00500	0.0065	<0.000200	<0.0100	<0.00500	7.35	1.34		
07/17/12	0.0238	0.0206	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.93	1.43	714	747
10/03/12	0.0418	4.51	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	7.12	<1.00	698	718
11/29/17	0.0192	10.2	<0.0100	<0.0100	<0.0100	<0.000200	<0.0150	<0.00500	14	0.55 J	896	815
07/18/18	<0.0100	9.58	<0.0100	0.00471 J	<0.0100	0.0000984 B,J	<0.0150	<0.00500	5.6	<1.0	850	1000
Field Point MW-18	Well Screen Interval (feet): 27.00-42.00											
08/19/09	0.0178	0.144	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	113	232	961	1510
10/30/09	0.0377	0.249	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	28.1	42.8	989	890
10/13/11	0.0102	0.138	<0.00100	<0.00500	0.0065	<0.000200	<0.0100	<0.00500	46.6	15.7		
Field Point MW-19	Well Screen Interval (feet): 27.00-42.00											
08/19/09	0.0203	0.0352	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	29.6	145	224	554
10/30/09	0.0169	0.0374	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	23.1	148	209	380

TABLE 6
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-19	Well Screen Interval (feet): 27.00-42.00											
10/13/11	0.0197	0.0321	<0.00100	<0.00500	0.0052	<0.000200	<0.0100	<0.00500	30	140		
07/17/12	0.0237	0.0357	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	32.2	150	196	595
10/03/12	0.0308	0.0271	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	33.8	151	195	579
05/15/13	0.0185	0.0307	<0.000200	<0.0012	0.0099	<0.00015	<0.0064	<0.0013	36	156	189	585
01/29/14	0.028	0.0281	<0.000200	<0.0012	0.0039 J	<0.00015	<0.0064	<0.0013	40.9	163	203	570 B
06/18/14	0.0161	0.0247	0.0006 J	<0.00300	<0.002	<0.00015	0.0083 J	<0.0025	43.6 B	176	192	621
11/18/14	0.02	0.023	<0.00100	<0.00500	0.0098	<0.000200	<0.0100	<0.00500	43	170	190	610
12/09/15	0.0275	0.0242	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	41.2	162	234	610
04/27/16	0.0253	0.0265	<0.00100	<0.00500	<0.00500	<0.000200	0.0108	<0.00500	39.5	131	248	623
10/25/16	0.0240	0.0288	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	32.7	152	296	617
05/24/17	0.0327	0.0496	<0.0100	<0.0100	<0.0100	<0.000200	<0.0150	<0.00500	25	150	342	620
11/29/17	0.0382	0.0579	<0.0100	0.116	<0.0100	<0.000200	0.00751 J	<0.00500	23	130	361	605
07/18/18	0.0388	0.0497	<0.0100	<0.0100	<0.0100	0.000112 B,J	<0.0150	<0.00500	36	120	300	610
Field Point MW-20	Well Screen Interval (feet): 29.50-44.50											
08/19/09	<0.0100	0.0908	<0.00100	<0.00500	<0.00500	<0.000200	0.015	<0.00500	440	417	187	1580
10/30/09	<0.0100	0.0705	<0.00100	<0.00500	<0.00500	<0.000200	0.0148	<0.00500	301	386	235	1230
10/13/11	<0.0100	0.0521	<0.00100	<0.00500	0.0057	<0.000200	0.0212	<0.00500	391	428		
07/17/12	0.0115	0.0481	<0.00100	<0.00500	<0.00500	<0.000200	0.0295	<0.00500	423	528	241	1870
10/03/12	0.0183	0.0476	<0.00100	<0.00500	<0.00500	<0.000200	0.0382	<0.00500	506	682	208	2090
05/15/13	0.0167	0.0377	<0.000200	<0.0012	<0.0017	<0.00015	0.0446	<0.0013	551	786	226	2370
01/29/14	0.0152	0.0321	<0.000200	<0.0012	<0.0035	0.00042	0.0402	<0.0013	538	719	268	2170 B
06/18/14	<0.0072	0.0322	0.0009 J	<0.00300	<0.002	0.000203	0.0354	<0.0025	527 B	756	257	2280
11/18/14	<0.0100	0.04	<0.00100	<0.00500	<0.00500	<0.000200	0.024	<0.00500	530	710	250	2100
Field Point MW-21	Well Screen Interval (feet): 29.50-44.50											
08/19/09	0.0248	0.0263	<0.00100	<0.00500	<0.00500	<0.000200	0.0126	<0.00500	38.8	666	248	1360
10/30/09	0.0245	0.0216	<0.00100	<0.00500	<0.00500	<0.000200	0.0146	<0.00500	39.3	816	222	1340
10/13/11	0.0311	0.0155	0.004	<0.00500	0.0052	<0.000200	0.0107	<0.00500	26.7	634		
07/17/12	0.0349	0.0161	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	21.1	559	232	1270
10/03/12	0.0435	0.0131	<0.00100	<0.00500	<0.00500	<0.000200	0.011	<0.00500	23.3	597	242	1260
05/15/13	0.0251	0.0154	<0.000200	<0.0012	0.0082	<0.00015	0.0224	<0.0013	18.9	535	239	1140
01/29/14	0.0355	0.0132	<0.000200	<0.0012	<0.0035	<0.00015	<0.0064	<0.0013	14.7	422	263	972 B

TABLE 6
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-21	Well Screen Interval (feet): 29.50-44.50											
06/18/14	0.0307	0.0125	0.0008 J	<0.00300	<0.002	<0.00015	0.008 J	<0.0025	12.8 B	383	353	932
11/18/14	0.0310	0.013	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	12	360	250	860
12/08/15	0.0344	0.0138	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	10.3	323	286	875
04/27/16	0.0355	0.0145	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	9.67	306	288	849
10/25/16	0.0341	0.0157	<0.00100	0.0154	<0.00500	<0.000200	<0.0100	<0.00500	13.4	322	281	828
Field Point MW-22	Well Screen Interval (feet): 30.00-45.00											
10/30/09	0.013	0.0376	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	42.4	266	213	630
10/13/11	0.018	0.023	<0.00100	<0.00500	0.0059	<0.000200	<0.0100	<0.00500	41.3	288		
07/17/12	0.0353	4.49	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	40.1	274	206	806
10/03/12	0.0232	0.0197	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	42.5	280	223	792
05/15/13	0.0209	0.0204	<0.000200	<0.0012	0.0085	<0.00015	0.0161	<0.0013	41.7	293	212	782
01/29/14	0.0288	0.0191	<0.000200	<0.0012	0.0044 J	<0.00015	0.0066 J	<0.0013	42.8	242	236	750 B
01/29/14 D	0.0299	0.0188	<0.000200	<0.0012	<0.00035	<0.00015	0.0067 J	<0.0013	42.8	257	233	750 B
06/18/14	0.0179	0.0192	0.0007 J	<0.00300	<0.002	<0.000150	0.0096 J	<0.0025	42.7 B	248	221	776
11/19/14	0.019	0.018	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	41	240	230	800
12/08/15	0.0176	0.0221	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	33.2	204	260	689
04/27/16	0.0201	0.0215	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	33.6	184	256	664
10/25/16	0.0190	0.0283	<0.00100	0.00700	<0.00500	<0.000200	<0.0100	<0.00500	37.4	22.4	236	709
05/24/17	0.0141	0.0199	<0.0100	<0.0100	<0.0100	<0.000200	<0.0150	<0.00500	32	200	260	650
11/29/17	0.0194	0.0259	<0.0100	<0.0100	<0.0100	<0.000200	<0.0150	<0.00500	32	190	250	675
07/18/18	0.0236	0.0223	<0.0100	<0.0100	<0.0100	0.000161 B,J	0.0432	<0.00500	34	19	240	615
Field Point MW-23	Well Screen Interval (feet): 31.00-46.00											
02/22/12	0.0258	0.061	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500				
07/17/12	0.0307	0.0392	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	3.06	91.9	425	652
10/03/12	0.0335	0.0334	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	3.34	79.4	412	654
05/15/13	0.0259	0.037	<0.000200	<0.0012	0.0065	<0.00015	0.0129	<0.0013	2.85	73.6 J	377	635
01/29/14	0.0343	0.0385	<0.000200	<0.0012	0.0052	<0.00015	<0.0064	<0.0013	3.76	109	393	597 B
06/18/14	0.0308	0.0889	0.0007 J	0.0035 J	0.0027 J	<0.00015	0.0063 J	<0.0025	4.27 B	111	370	628
11/18/14	0.033	0.053	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	3.9	100	370	630
12/08/15	0.0452	0.102	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.59	42.9	476	624
04/27/16	0.0577	0.768	<0.00100	0.0832	0.0314	<0.000200	<0.0100	<0.00500	6.70	51.9	429	607

TABLE 6
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point MW-25	Well Screen Interval (feet):		28.00-43.00									
02/22/12	0.062	7.1	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500				
Field Point MW-26	Well Screen Interval (feet):		30.00-45.00									
02/22/12	0.0135	0.0408	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500				
07/17/12	0.0123	0.0391	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	19.5	136	304	723
10/03/12	0.0198	0.0296	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	24	165	307	736
05/15/13	0.019	0.0366	<0.000200	<0.0012	<0.0017	<0.00015	0.0085 J	<0.0013	25.6	196	303	769
01/29/14	0.0159	0.0335	<0.000200	<0.0012	<0.0035	<0.00015	<0.0064	<0.0013	26.6	192	332	751 B
06/18/14	0.0133	0.0508	0.0006 J	<0.00300	<0.002	<0.00015	0.0068 J	<0.0025	25.3 B	188	307	787
11/19/14	0.015	0.031	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	25	220	320	830
12/08/15	0.0161	0.0530	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	24.8	204	336	781
04/27/16	0.0165	0.111	<0.00100	<0.00500	0.00600	0.000399	<0.0100	<0.00500	31.7	98.6	308	771
10/25/16	0.0300	1.37	0.00120	0.0404	0.0182	<0.000200	<0.0100	<0.00500	26.2	236	339	806
05/24/17	<0.0100	0.136	<0.0100	<0.0100	<0.0100	0.000162 J	<0.0150	<0.00500	28	220	317	755
11/29/17	0.0127	0.0633	<0.0100	<0.0100	<0.0100	<0.000200	<0.0150	<0.00500	24	200	355	735
07/18/18	0.0249	0.0330	<0.0100	<0.0100	<0.0100	0.000129 B,J	0.0144 J	0.00155 J	30	170	320	720
Field Point MW-27	Well Screen Interval (feet):		35.00-50.00									
07/19/18	0.0226	0.0521	<0.0100	<0.0100	<0.0100	0.000115 B,J	0.0519	<0.00500	280	130	170	980
Field Point MW-28	Well Screen Interval (feet):		35.00-50.00									
07/19/18	0.0156	0.0874	<0.0100	<0.0100	<0.0100	0.000104 B,J	0.0300	0.00196 J	220	430	140	1060
Field Point MW-29	Well Screen Interval (feet):		35.00-50.00									
07/19/18	0.0213	0.0809	<0.0100	<0.0100	<0.0100	0.000116 B,J	0.0282	0.00145 J	190	100	170	805
Field Point MW-30	Well Screen Interval (feet):		35.00-50.00									
07/19/18	0.00958 J	0.0590	<0.0100	<0.0100	<0.0100	0.000102 B,J	<0.0150	<0.00500	170	100	170	725
Field Point MW-31	Well Screen Interval (feet):		35.00-50.00									
07/19/18	<0.0100	0.0633	<0.0100	<0.0100	<0.0100	0.000103 B,J	0.0202	0.00222 J	120	150	250	735
Field Point MW-32	Well Screen Interval (feet):		35.00-50.00									
07/19/18	<0.0100	0.0799	<0.0100	<0.0100	<0.0100	0.000153 B,J	0.0187	<0.00500	47	53	450	705

TABLE 6
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 Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Arsenic (mg/l)	Barium (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Lead (mg/l)	Mercury (mg/l)	Selenium (mg/l)	Silver (mg/l)	Chloride (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	TDS (mg/l)
NMED WQCC HHS	0.1	1	0.01	0.05	0.05	0.002	0.05	0.05	250.0	600.0	NA	1000.0
Field Point SB-1GW 10/28/11	Grab Groundwater Sample											
	<0.0100	0.0808	<0.00100	<0.00500	0.0053	<0.000200	<0.0100	<0.00500	9.4	77.8		
Field Point SB-2GW 10/28/11	Grab Groundwater Sample											
	0.0139	0.134	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	156	307		
Field Point SB-3GW 10/28/11	Grab Groundwater Sample											
	0.0338	7.8	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	2.84	2.3		
Field Point SB-4GW 10/28/11	Grab Groundwater Sample											
	0.0296	3.44	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	5.9	2.8		
Field Point SB-5GW 10/28/11	Grab Groundwater Sample											
	<0.0100	0.0971	<0.00100	<0.00500	<0.00500	<0.000200	0.0105	<0.00500	180	421		
Field Point SB-6GW 10/28/11	Grab Groundwater Sample											
	0.0116	0.0343	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	7.04	290		
Field Point SB-7GW 10/28/11	Grab Groundwater Sample											
	<0.0100	0.465	<0.00100	<0.00500	<0.00500	<0.000200	<0.0100	<0.00500	4.58	38.6		

TABLE 6
CUMULATIVE GROUNDWATER ANALYTICAL RESULTS FOR METALS AND ADDITIONAL PARAMETERS
Gladiola Station
Lea County, New Mexico
Cardno 3612

Notes: Data collected prior to December 8, 2015 provided by AECOM.
ELEV = Elevation.
GW = Groundwater.
NAPL = Non-aqueous phase liquid.
Groundwater elevations are adjusted for NAPL thickness using a relative density of 0.83.
NMED WQCC HHS = New Mexico Environmental Department Water Quality Control Commission Human Health Standard for groundwater with 10,000 mg/l TDS or less.
Bolded values equal or exceed applicable regulatory limits.
Naphthalene is analyzed by EPA Method 8270C unless otherwise noted.
Total naphthalenes are the sum of 1- and 2-methylnaphthalene and naphthalene.
TDS = Total dissolved solids.
mg/l = Milligrams per liter.
BDL = Below laboratory detection limits.
< = Not detected at or above stated laboratory reporting limit.
A-01 = Could not obtain constant weight.
D = Duplicate sample.
J = Estimated value between method detection limit and practical quantitation limit.
R1 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the higher value was reported.
R10 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported due to apparent chromatographic problems.
R12 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported.
X = Pre-purge/no-purge sample.
(a) = Analyzed by EPA Method 8310.
(b) = Analyzed by EPA Method 8260B.
(c) = Analyzed method unknown.
(d) = Analyzed to determine the presense of NAPL.

TABLE 7
CONSTITUENTS DETECTED IN GROUNDWATER BY FULL SCAN 8260B - CUMULATIVE DATA
(EXCEPT BTEX AND FUEL OXYGENATES)

Gladiola Station
Lea County, New Mexico
Cardno 3612

Date	Acetone (2-propanone) (mg/l)	2-Butanone (MEK) (mg/l)	1,2-Dichloroethane (mg/l)	Isopropylbenzene (mg/l)	Naphthalene (mg/l)	n-Butylbenzene (mg/l)	n-Propylbenzene (mg/l)	p-Isopropyltoluene (mg/l)	sec-Butylbenzene (mg/l)	tert-Butylbenzene (mg/l)	1,2,4-Trimethylbenzene (mg/l)	1,3,5-Trimethylbenzene (mg/l)	
NMED WQCC HHS	NA	NA	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Field Point MW-6													
05/24/17	0.0041 J					0.00028 J		0.00031 J	0.00084	0.00027 J	0.00094	0.0021	
11/29/17	0.0045 J					0.00022 J		0.00077	0.00047 J		0.0011	0.0017	
07/20/18	0.0041 J												
Field Point MW-10													
05/24/17													
11/29/17	0.0056 J								0.00036 J				
07/20/18	0.0081 J								0.00060				
Field Point MW-11													
05/24/17													
11/29/17	0.0067 J				0.0013 J	0.00061		0.00024 J	0.00025 J		0.0014	0.00056	
07/18/18													
Field Point MW-17													
11/29/17				0.056	0.087 J	0.0058 J	0.051		0.0070 J		0.17	0.023	
07/18/18				0.047	0.057 J	0.0046 J	0.044		0.0057 J		0.094	0.012	
Field Point MW-19													
05/24/17		0.0045 J		0.0068	0.0017 J	0.0022	0.0037	0.0027	0.0024	0.00079	0.020	0.021	
11/29/17	0.0052 J	0.0023 J		0.0057	0.00055 J	0.0023	0.0036	0.0024	0.0023	0.00068	0.026	0.021	
07/18/18	0.0042 J			0.0019		0.00022 J	0.0011	0.0010	0.0013	0.00044 J	0.0030	0.00041 J	
Field Point MW-22													
05/24/17													
11/29/17	0.0068 J												
07/18/18													
Field Point MW-26													
05/24/17			0.0011		0.00077 J						0.0014		
11/29/17											0.00045 J		
07/18/18				0.017	0.026 J	0.0050	0.017	0.0036	0.0042		0.12	0.041	
Field Point MW-27													
07/19/18	0.0045 J												
Field Point MW-28													
07/19/18													

TABLE 7
CONSTITUENTS DETECTED IN GROUNDWATER BY FULL SCAN 8260B - CUMULATIVE DATA
(EXCEPT BTEX AND FUEL OXYGENATES)

Gladiola Station
 Lea County, New Mexico
 Cardno 3612

Date	Acetone (2-propanone) (mg/l)	2-Butanone (MEK) (mg/l)	1,2-Dichloroethane (mg/l)	Isopropylbenzene (mg/l)	Naphthalene (mg/l)	n-Butylbenzene (mg/l)	n-Propylbenzene (mg/l)	p-Isopropyltoluene (mg/l)	sec-Butylbenzene (mg/l)	tert-Butylbenzene (mg/l)	1,2,4-Trimethylbenzene (mg/l)	1,3,5-Trimethylbenzene (mg/l)	
NMED WQCC HHS	NA	NA	0.01	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Field Point MW-29 07/19/18													
Field Point MW-30 07/19/18													
Field Point MW-31 07/19/18				0.00029 J			0.00022 J				0.0019	0.00091	
Field Point MW-32 07/19/18	0.0050 J			0.0054			0.00039 J	0.0014	0.0016	0.00084	0.012	0.010	

TABLE 7
CONSTITUENTS DETECTED IN GROUNDWATER BY FULL SCAN 8260B - CUMULATIVE DATA
(EXCEPT BTEX AND FUEL OXYGENATES)

Gladiola Station
Lea County, New Mexico
Cardno 3612

Notes: Data collected prior to December 8, 2015 provided by AECOM.
ELEV = Elevation.
GW = Groundwater.
NAPL = Non-aqueous phase liquid.
Groundwater elevations are adjusted for NAPL thickness using a relative density of 0.83.
NMED WQCC HHS = New Mexico Environmental Department Water Quality Control Commission Human Health Standard for groundwater with 10,000 mg/l TDS or less.
Bolded values equal or exceed applicable regulatory limits.
Naphthalene is analyzed by EPA Method 8270C unless otherwise noted.
Total naphthalenes are the sum of 1- and 2-methylnaphthalene and naphthalene.
TDS = Total dissolved solids.
mg/l = Milligrams per liter.
BDL = Below laboratory detection limits.
< = Not detected at or above stated laboratory reporting limit.
A-01 = Could not obtain constant weight.
D = Duplicate sample.
J = Estimated value between method detection limit and practical quantitation limit.
R1 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the higher value was reported.
R10 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported due to apparent chromatographic problems.
R12 = The relative percent difference between the primary and confirmatory analysis exceeded 40%; the lower value was reported.
X = Pre-purge/no-purge sample.
(a) = Analyzed by EPA Method 8310.
(b) = Analyzed by EPA Method 8260B.
(c) = Analyzed method unknown.
(d) = Analyzed to determine the presense of NAPL.

Unless noted otherwise, all sampled wells were analyzed by EPA Method 8260B full scan.
Note: table only reflects concentrations above the laboratory reporting limit. Refer to the laboratory report for the reporting limit and dilution factor.

APPENDIX A

FIELD DATA SHEETS

Cardno Fluid-Level Monitoring Well Log							
Site Location: Tatum, New Mexico				Project Name: Gladiola Station			
Personnel(s): Stephen Hunter, Vincent Nguyen				Project Number: 0136122018			
Gauging Instrument: Solinst				Date(s): Tuesday, 7/17/18			
Well Number	Date	Time	Total Depth (ft)	Water Depth (ft)	Product Depth (ft)	Product Thickness (ft)	Remarks
MW-24	7/17/18	1330		39.49	38.18	1.31	2 inch diameter well
MW-15		1348		39.33	39.02	0.31	4"
MW-5		1356		40.03	38.82	1.21	2"
MW-14		1402		39.25	38.75	0.50	4"
* MW-19		1410		39.11			4"
MW-23		1415		39.46	39.39	0.07	2"
* B4/MW30		1420		39.10			4"
* B3/MW29		1425		39.52			4"
MW-21		1432		40.05	39.04	1.01	4"
MW-13		1440		39.86	38.90	0.96	4"
MW-18		1446		39.50	39.19	0.31	4"
MW-20		1451		40.48	39.29	1.19	4"
* B2/MW28		1456		39.65			4"
* B1/MW27		1500		39.63			4"
MW-25		1504		40.20	39.50	0.70	2"
* MW-26		1510		39.89			2"
* MW-17		1515		40.08			4"
MW-12		1520		40.57	40.11	0.46	4"
* B6/MW32		1525		41.28			4"
* MW-22		1536		40.90			4"
* MW-11		1541		40.58			4"
* MW-10	↓	1546		41.27			4"
* B5/MW31	7/17/18	1551		39.90			4"

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APPENDIX B

LABORATORY ANALYTICAL REPORT



Calscience

**WORK ORDER NUMBER: 18-07-1590***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For**Client:** Cardno**Client Project Name:** ExxonMobil Gladiola Station**Attention:** David Purdy
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825Approved for release on 08/06/2018 by:
Cecile deGuia
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



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Client Project Name: ExxonMobil Gladiola Station
Work Order Number: 18-07-1590

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The difference is service

Work Order: 18-07-1590

Page 1 of 1

Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/21/18. They were assigned to Work Order 18-07-1590.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
PO Number:
Date/Time Received: 07/21/18 11:30
Number of Containers: 35

Attn: David Purdy

Sample Summary

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-41-MW17	18-07-1590-1	07/18/18 10:00	12	Aqueous
W-40-MW19	18-07-1590-2	07/18/18 13:15	11	Aqueous
W-41-MW26	18-07-1590-3	07/18/18 15:15	11	Aqueous
TRIP BLANK	18-07-1590-4	07/18/18 00:00	1	Aqueous

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: 1 (W-41-MW17, Aqueous) Sampled: 07/18/18 10:00									
EPA 300.0 Anions (Extraction Method: N/A) Container - F									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Sulfate	ND		mg/L	0.49	1.0	1.00	07/23/18 20:36	EPA 300.0	180723L01
SM 2320B Alkalinity (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Alkalinity, Total (as CaCO3)	850		mg/L	1.7	5.0	1.00	07/24/18 02:19	SM 2320B	I0723ALKB2
SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Solids, Total Dissolved	1000		mg/L	0.870	10.0	1.00	07/24/18 18:00	SM 2540 C	I0724TDSL3
SM 4500-CL C Chloride (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Chloride	5.6		mg/L	0.76	2.0	1.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Arsenic	ND		mg/L	0.00438	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Barium	9.58		mg/L	0.00296	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Cadmium	ND		mg/L	0.00269	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Chromium	0.00471	J	mg/L	0.00271	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Lead	ND		mg/L	0.00406	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Selenium	ND		mg/L	0.00699	0.0150	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Silver	ND		mg/L	0.00139	0.00500	1.00	08/03/18 15:49	EPA 6010B	180730LA5
EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Mercury	0.000098 4	B,J	mg/L	0.000045 3	0.000200	1.00	08/02/18 14:53	EPA 7470A	180802LA1M
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - I									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Acenaphthylene	0.000077	J	mg/L	0.000072	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Acenaphthene	0.00011	J	mg/L	0.000059	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Fluorene	0.0015		mg/L	0.000071	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Phenanthrene	0.00073		mg/L	0.000065	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		mg/L	0.000066	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Fluoranthene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		mg/L	0.000069	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Chrysene	ND		mg/L	0.000064	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		mg/L	0.000078	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		mg/L	0.000083	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Benzo (a) Pyrene	ND		mg/L	0.000099	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	0.000080	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		mg/L	0.000092	0.00019	1.00	07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	99%						07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	81%						07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	89%						07/26/18 17:44	EPA 8270C SIM PAHs	180725L01
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - I									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Naphthalene	0.053		mg/L	0.00071	0.0019	10.0	07/27/18 14:07	EPA 8270C SIM PAHs	180725L01
2-Methylnaphthalene	0.028		mg/L	0.00072	0.0019	10.0	07/27/18 14:07	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	0.026		mg/L	0.00072	0.0019	10.0	07/27/18 14:07	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	61%						07/27/18 14:07	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	88%						07/27/18 14:07	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	83%						07/27/18 14:07	EPA 8270C SIM PAHs	180725L01
EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - B									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Benzene	0.15		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Toluene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Ethylbenzene	0.72		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
o-Xylene	0.011		mg/L	0.0063	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
p/m-Xylene	0.19		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Xylenes (total)	0.20		mg/L	0.0040	0.010	1.00	07/31/18 03:15	EPA 8260B	180730L031
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	0.0040	0.020	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,1,1,2-Tetrachloroethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,1,1-Trichloroethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,1,2,2-Tetrachloroethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031



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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
1,1,2-Trichloroethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	0.0048	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,1-Dichloroethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,1-Dichloroethene	ND		mg/L	0.0056	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,1-Dichloropropene	ND		mg/L	0.0060	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,2,3-Trichlorobenzene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,2,3-Trichloropropane	ND		mg/L	0.0080	0.020	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,2,4-Trichlorobenzene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,2,4-Trimethylbenzene	0.094		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,3,5-Trimethylbenzene	0.012		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
c-1,2-Dichloroethene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,2-Dibromo-3-Chloropropane	ND		mg/L	0.040	0.10	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,2-Dibromoethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,2-Dichlorobenzene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,2-Dichloroethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,2-Dichloropropane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
t-1,2-Dichloroethene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
c-1,3-Dichloropropene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,3-Dichlorobenzene	ND		mg/L	0.0055	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,3-Dichloropropane	ND		mg/L	0.0080	0.020	20.0	07/31/18 03:15	EPA 8260B	180730L031
t-1,3-Dichloropropene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
1,4-Dichlorobenzene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
2,2-Dichloropropane	ND		mg/L	0.0080	0.020	20.0	07/31/18 03:15	EPA 8260B	180730L031
2-Chlorotoluene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
4-Chlorotoluene	ND		mg/L	0.0071	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
4-Methyl-2-Pentanone	ND		mg/L	0.040	0.10	20.0	07/31/18 03:15	EPA 8260B	180730L031
Acetone	ND		mg/L	0.080	0.20	20.0	07/31/18 03:15	EPA 8260B	180730L031
Bromobenzene	ND		mg/L	0.0064	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Bromochloromethane	ND		mg/L	0.0080	0.020	20.0	07/31/18 03:15	EPA 8260B	180730L031
Bromoform	ND		mg/L	0.0049	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Bromomethane	ND		mg/L	0.0080	0.020	20.0	07/31/18 03:15	EPA 8260B	180730L031
Carbon Disulfide	ND		mg/L	0.0080	0.020	20.0	07/31/18 03:15	EPA 8260B	180730L031
Carbon Tetrachloride	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Chlorobenzene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Dibromochloromethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Chloroethane	ND		mg/L	0.0063	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Chloroform	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Chloromethane	ND		mg/L	0.0059	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Dibromomethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Bromodichloromethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Dichlorodifluoromethane	ND		mg/L	0.0080	0.020	20.0	07/31/18 03:15	EPA 8260B	180730L031
Hexachloro-1,3-Butadiene	ND		mg/L	0.016	0.040	20.0	07/31/18 03:15	EPA 8260B	180730L031

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Isopropylbenzene	0.047		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
2-Butanone	ND		mg/L	0.040	0.10	20.0	07/31/18 03:15	EPA 8260B	180730L031
Methylene Chloride	ND		mg/L	0.016	0.020	20.0	07/31/18 03:15	EPA 8260B	180730L031
2-Hexanone	ND		mg/L	0.080	0.20	20.0	07/31/18 03:15	EPA 8260B	180730L031
Naphthalene	0.057	J	mg/L	0.0080	0.20	20.0	07/31/18 03:15	EPA 8260B	180730L031
n-Butylbenzene	0.0046	J	mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
n-Propylbenzene	0.044		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
p-Isopropyltoluene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
sec-Butylbenzene	0.0057	J	mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Styrene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
tert-Butylbenzene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Tetrachloroethene	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Trichloroethene	ND		mg/L	0.0057	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Trichlorofluoromethane	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Vinyl Chloride	ND		mg/L	0.0040	0.010	20.0	07/31/18 03:15	EPA 8260B	180730L031
Surr: 1,4-Bromofluorobenzene (68-120%)							07/31/18 03:15	EPA 8260B	180730L031
Surr: Dibromofluoromethane (80-127%)							07/31/18 03:15	EPA 8260B	180730L031
Surr: 1,2-Dichloroethane-d4 (80-128%)							07/31/18 03:15	EPA 8260B	180730L031
Surr: Toluene-d8 (80-120%)							07/31/18 03:15	EPA 8260B	180730L031

Sample ID: 2 (W-40-MW19, Aqueous) Sampled: 07/18/18 13:15

EPA 300.0 Anions (Extraction Method: N/A) Container - F

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Sulfate	120	mg/L	0.98	2.0	2.00	07/24/18 23:38	EPA 300.0	180724L02
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SM 2320B Alkalinity (Extraction Method: N/A) Container - H

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Alkalinity, Total (as CaCO3)	300	mg/L	1.7	5.0	1.00	07/24/18 02:19	SM 2320B	I0723ALKB2
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SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Solids, Total Dissolved	610	mg/L	0.870	1.00	1.00	07/24/18 18:00	SM 2540 C	I0724TDSL3
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SM 4500-CL C Chloride (Extraction Method: N/A) Container - H

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Chloride	36	mg/L	0.76	2.0	1.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
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EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Arsenic	0.0388	mg/L	0.00438	0.0100	1.00	08/03/18 15:50	EPA 6010B	180730LA5
Barium	0.0497	mg/L	0.00296	0.0100	1.00	08/03/18 15:50	EPA 6010B	180730LA5
Cadmium	ND	mg/L	0.00269	0.0100	1.00	08/03/18 15:50	EPA 6010B	180730LA5
Chromium	ND	mg/L	0.00271	0.0100	1.00	08/03/18 15:50	EPA 6010B	180730LA5
Lead	ND	mg/L	0.00406	0.0100	1.00	08/03/18 15:50	EPA 6010B	180730LA5
Selenium	ND	mg/L	0.00699	0.0150	1.00	08/03/18 15:50	EPA 6010B	180730LA5



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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Silver	ND		mg/L	0.00139	0.00500	1.00	08/03/18 15:50	EPA 6010B	180730LA5
EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Mercury	0.000112	B,J	mg/L	0.000045	0.000200	1.00	08/02/18 14:55	EPA 7470A	180802LA1M
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - I									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Naphthalene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
2-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Acenaphthylene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Acenaphthene	ND		mg/L	0.000058	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Fluorene	ND		mg/L	0.000070	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Phenanthrene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Fluoranthene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		mg/L	0.000069	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Chrysene	ND		mg/L	0.000064	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		mg/L	0.000077	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		mg/L	0.000082	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Benzo (a) Pyrene	ND		mg/L	0.000098	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	0.000079	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		mg/L	0.000074	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		mg/L	0.000092	0.00019	1.00	07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	77%						07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	84%						07/26/18 18:04	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	89%						07/26/18 18:04	EPA 8270C SIM PAHs	180725L01

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - E									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Benzene	0.00034	J	mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Toluene	0.00072		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Ethylbenzene	0.00037	J	mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
o-Xylene	ND		mg/L	0.00032	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
p/m-Xylene	0.00021	J	mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Xylenes (total)	0.00021	JA	mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	0.00020	0.0010	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,1,1,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,1,1-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,1,2,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,1,2-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	0.00024	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,1-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,1-Dichloroethene	ND		mg/L	0.00028	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,1-Dichloropropene	ND		mg/L	0.00030	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,2,3-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,2,3-Trichloropropane	ND		mg/L	0.00040	0.0010	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,2,4-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,2,4-Trimethylbenzene	0.0030		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,3,5-Trimethylbenzene	0.00041	J	mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
c-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,2-Dibromo-3-Chloropropane	ND		mg/L	0.0020	0.0050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,2-Dibromoethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,2-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,2-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,2-Dichloropropane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
t-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
c-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,3-Dichlorobenzene	ND		mg/L	0.00028	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,3-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	07/30/18 22:23	EPA 8260B	180730L031
t-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
1,4-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
2,2-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	07/30/18 22:23	EPA 8260B	180730L031
2-Chlorotoluene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
4-Chlorotoluene	ND		mg/L	0.00036	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
4-Methyl-2-Pentanone	ND		mg/L	0.0020	0.0050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Acetone	0.0042	J	mg/L	0.0040	0.010	1.00	07/30/18 22:23	EPA 8260B	180730L031
Bromobenzene	ND		mg/L	0.00032	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Bromochloromethane	ND		mg/L	0.00040	0.0010	1.00	07/30/18 22:23	EPA 8260B	180730L031
Bromoform	ND		mg/L	0.00025	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Bromomethane	ND		mg/L	0.00040	0.0010	1.00	07/30/18 22:23	EPA 8260B	180730L031
Carbon Disulfide	ND		mg/L	0.00040	0.0010	1.00	07/30/18 22:23	EPA 8260B	180730L031
Carbon Tetrachloride	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Chlorobenzene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Dibromochloromethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Chloroethane	ND		mg/L	0.00032	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Chloroform	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Chloromethane	ND		mg/L	0.00029	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Dibromomethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Bromodichloromethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Dichlorodifluoromethane	ND		mg/L	0.00040	0.0010	1.00	07/30/18 22:23	EPA 8260B	180730L031
Hexachloro-1,3-Butadiene	ND		mg/L	0.00080	0.0020	1.00	07/30/18 22:23	EPA 8260B	180730L031
Isopropylbenzene	0.0019		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
2-Butanone	ND		mg/L	0.0020	0.0050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Methylene Chloride	ND		mg/L	0.00080	0.0010	1.00	07/30/18 22:23	EPA 8260B	180730L031
2-Hexanone	ND		mg/L	0.0040	0.010	1.00	07/30/18 22:23	EPA 8260B	180730L031
Naphthalene	ND		mg/L	0.00040	0.010	1.00	07/30/18 22:23	EPA 8260B	180730L031
n-Butylbenzene	0.00022	J	mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
n-Propylbenzene	0.0011		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
p-Isopropyltoluene	0.0010		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
sec-Butylbenzene	0.0013		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Styrene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
tert-Butylbenzene	0.00044	J	mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Tetrachloroethene	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Trichloroethene	ND		mg/L	0.00029	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Trichlorofluoromethane	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031
Vinyl Chloride	ND		mg/L	0.00020	0.00050	1.00	07/30/18 22:23	EPA 8260B	180730L031

Surr: 1,4-Bromofluorobenzene (68-120%)	101%						07/30/18 22:23	EPA 8260B	180730L031
Surr: Dibromofluoromethane (80-127%)	107%						07/30/18 22:23	EPA 8260B	180730L031
Surr: 1,2-Dichloroethane-d4 (80-128%)	101%						07/30/18 22:23	EPA 8260B	180730L031
Surr: Toluene-d8 (80-120%)	104%						07/30/18 22:23	EPA 8260B	180730L031

Sample ID: 3 (W-41-MW26, Aqueous) Sampled: 07/18/18 15:15

EPA 300.0 Anions (Extraction Method: N/A) Container - F

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Sulfate	170		mg/L	2.4	5.0	5.00	07/24/18 23:56	EPA 300.0	180724L02
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SM 2320B Alkalinity (Extraction Method: N/A) Container - G

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Alkalinity, Total (as CaCO3)	320		mg/L	1.7	5.0	1.00	07/24/18 02:19	SM 2320B	I0723ALKB2
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SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.



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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Solids, Total Dissolved	720		mg/L	0.870	1.00	1.00	07/24/18 18:00	SM 2540 C	I0724TDSL3
SM 4500-CL C Chloride (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Chloride	30		mg/L	0.76	2.0	1.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Arsenic	0.0249		mg/L	0.00438	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Barium	0.0330		mg/L	0.00296	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Cadmium	ND		mg/L	0.00269	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Chromium	ND		mg/L	0.00271	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Lead	ND		mg/L	0.00406	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Selenium	0.0144	J	mg/L	0.00699	0.0150	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Silver	0.00155	J	mg/L	0.00139	0.00500	1.00	08/03/18 15:51	EPA 6010B	180730LA5
EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Mercury	0.000129	B,J	mg/L	0.000045 3	0.000200	1.00	08/02/18 14:57	EPA 7470A	180802LA1M
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - I									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Naphthalene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
2-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Acenaphthylene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Acenaphthene	ND		mg/L	0.000058	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Fluorene	ND		mg/L	0.000070	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Phenanthrene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Fluoranthene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		mg/L	0.000069	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Chrysene	ND		mg/L	0.000064	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		mg/L	0.000077	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		mg/L	0.000082	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Benzo (a) Pyrene	ND		mg/L	0.000098	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	0.000079	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		mg/L	0.000074	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		mg/L	0.000092	0.00019	1.00	07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	85%						07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	92%						07/26/18 18:24	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	94%						07/26/18 18:24	EPA 8270C SIM PAHs	180725L01

EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - B

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Benzene	0.12		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Toluene	0.0012	J	mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Ethylbenzene	0.059		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
o-Xylene	0.038		mg/L	0.0016	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
p/m-Xylene	0.13		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Xylenes (total)	0.17		mg/L	0.0010	0.0025	1.00	07/31/18 03:41	EPA 8260B	180730L031
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	0.0010	0.0050	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,1,1,2-Tetrachloroethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,1,1-Trichloroethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,1,2,2-Tetrachloroethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,1,2-Trichloroethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	0.0012	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,1-Dichloroethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,1-Dichloroethene	ND		mg/L	0.0014	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,1-Dichloropropene	ND		mg/L	0.0015	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,2,3-Trichlorobenzene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,2,3-Trichloropropane	ND		mg/L	0.0020	0.0050	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,2,4-Trichlorobenzene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,2,4-Trimethylbenzene	0.12		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,3,5-Trimethylbenzene	0.041		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
c-1,2-Dichloroethene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,2-Dibromo-3-Chloropropane	ND		mg/L	0.010	0.025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,2-Dibromoethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,2-Dichlorobenzene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,2-Dichloroethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,2-Dichloropropane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
t-1,2-Dichloroethene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031



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20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
c-1,3-Dichloropropene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,3-Dichlorobenzene	ND		mg/L	0.0014	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,3-Dichloropropane	ND		mg/L	0.0020	0.0050	5.00	07/31/18 03:41	EPA 8260B	180730L031
t-1,3-Dichloropropene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
1,4-Dichlorobenzene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
2,2-Dichloropropane	ND		mg/L	0.0020	0.0050	5.00	07/31/18 03:41	EPA 8260B	180730L031
2-Chlorotoluene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
4-Chlorotoluene	ND		mg/L	0.0018	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
4-Methyl-2-Pentanone	ND		mg/L	0.010	0.025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Acetone	ND		mg/L	0.020	0.050	5.00	07/31/18 03:41	EPA 8260B	180730L031
Bromobenzene	ND		mg/L	0.0016	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Bromochloromethane	ND		mg/L	0.0020	0.0050	5.00	07/31/18 03:41	EPA 8260B	180730L031
Bromoform	ND		mg/L	0.0012	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Bromomethane	ND		mg/L	0.0020	0.0050	5.00	07/31/18 03:41	EPA 8260B	180730L031
Carbon Disulfide	ND		mg/L	0.0020	0.0050	5.00	07/31/18 03:41	EPA 8260B	180730L031
Carbon Tetrachloride	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Chlorobenzene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Dibromochloromethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Chloroethane	ND		mg/L	0.0016	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Chloroform	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Chloromethane	ND		mg/L	0.0015	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Dibromomethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Bromodichloromethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Dichlorodifluoromethane	ND		mg/L	0.0020	0.0050	5.00	07/31/18 03:41	EPA 8260B	180730L031
Hexachloro-1,3-Butadiene	ND		mg/L	0.0040	0.010	5.00	07/31/18 03:41	EPA 8260B	180730L031
Isopropylbenzene	0.017		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
2-Butanone	ND		mg/L	0.010	0.025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Methylene Chloride	ND		mg/L	0.0040	0.0050	5.00	07/31/18 03:41	EPA 8260B	180730L031
2-Hexanone	ND		mg/L	0.020	0.050	5.00	07/31/18 03:41	EPA 8260B	180730L031
Naphthalene	0.026	J	mg/L	0.0020	0.050	5.00	07/31/18 03:41	EPA 8260B	180730L031
n-Butylbenzene	0.0050		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
n-Propylbenzene	0.017		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
p-Isopropyltoluene	0.0036		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
sec-Butylbenzene	0.0042		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Styrene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
tert-Butylbenzene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Tetrachloroethene	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Trichloroethene	ND		mg/L	0.0014	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Trichlorofluoromethane	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Vinyl Chloride	ND		mg/L	0.0010	0.0025	5.00	07/31/18 03:41	EPA 8260B	180730L031
Surr: 1,4-Bromofluorobenzene (68-120%) 101%							07/31/18 03:41	EPA 8260B	180730L031

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Surr: Dibromofluoromethane (80-127%)	100%						07/31/18 03:41	EPA 8260B	180730L031
Surr: 1,2-Dichloroethane-d4 (80-128%)	100%						07/31/18 03:41	EPA 8260B	180730L031
Surr: Toluene-d8 (80-120%)	106%						07/31/18 03:41	EPA 8260B	180730L031


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Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
EPA 300.0 Anions						
099-12-906-8656						
Sulfate	ND		mg/L	180723L01	099-12-906-8656	07/23/18 10:22
EPA 300.0 Anions						
099-12-906-8657						
Sulfate	ND		mg/L	180724L02	099-12-906-8657	07/24/18 20:16
SM 2320B Alkalinity						
099-17-086-8						
Alkalinity, Total (as CaCO ₃)	ND		mg/L	I0723ALKB2	099-17-086-8	07/24/18 02:19
SM 2540 C Total Dissolved Solids						
099-12-180-6309						
Solids, Total Dissolved	ND		mg/L	I0724TDSL3	099-12-180-6309	07/24/18 18:00
SM 4500-CL C Chloride						
099-05-057-2222						
Chloride	ND		mg/L	I0724CLCL1	099-05-057-2222	07/24/18 18:00
EPA 6010B ICP Metals						
097-01-003-16987						
Arsenic	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Barium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Cadmium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Chromium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Lead	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Selenium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Silver	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
EPA 7470A Mercury						
099-12-457-382						
Mercury	0.0000644	J	mg/L	180802LA1M	099-12-457-382	08/02/18 14:34
EPA 8270C SIM PAHs						
099-06-008-1064						
Naphthalene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
2-Methylnaphthalene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
1-Methylnaphthalene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Acenaphthylene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Acenaphthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Fluorene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Phenanthrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Anthracene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Fluoranthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00

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Client: Cardno
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Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
Pyrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (a) Anthracene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Chrysene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (k) Fluoranthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (b) Fluoranthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (a) Pyrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Dibenz (a,h) Anthracene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (g,h,i) Perylene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Surr: Nitrobenzene-d5 (28-139%)	85%			180725L01	099-06-008-1064	07/26/18 15:00
Surr: 2-Fluorobiphenyl (33-144%)	84%			180725L01	099-06-008-1064	07/26/18 15:00
Surr: p-Terphenyl-d14 (23-160%)	93%			180725L01	099-06-008-1064	07/26/18 15:00

EPA 8260B Volatile Organics

099-12-878-751

Benzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Toluene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Ethylbenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
o-Xylene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
p/m-Xylene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Xylenes (total)	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,1,2-Tetrachloroethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,1-Trichloroethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,2,2-Tetrachloroethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,2-Trichloroethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,1-Dichloroethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,1-Dichloroethene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,1-Dichloropropene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,2,3-Trichlorobenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,2,3-Trichloropropane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,2,4-Trichlorobenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,2,4-Trimethylbenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,3,5-Trimethylbenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
c-1,2-Dichloroethene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dibromo-3-Chloropropane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dibromoethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dichlorobenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dichloroethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dichloropropane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25



Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
t-1,2-Dichloroethene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
c-1,3-Dichloropropene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,3-Dichlorobenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,3-Dichloropropane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
t-1,3-Dichloropropene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
1,4-Dichlorobenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
2,2-Dichloropropane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
2-Chlorotoluene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
4-Chlorotoluene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
4-Methyl-2-Pentanone	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Acetone	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Bromobenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Bromochloromethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Bromoform	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Bromomethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Carbon Disulfide	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Carbon Tetrachloride	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Chlorobenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Dibromochloromethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Chloroethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Chloroform	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Chloromethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Dibromomethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Bromodichloromethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Dichlorodifluoromethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Hexachloro-1,3-Butadiene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Isopropylbenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
2-Butanone	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Methylene Chloride	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
2-Hexanone	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Naphthalene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
n-Butylbenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
n-Propylbenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
p-Isopropyltoluene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
sec-Butylbenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Styrene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
tert-Butylbenzene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Tetrachloroethene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Trichloroethene	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Trichlorofluoromethane	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25
Vinyl Chloride	ND		mg/L	180730L031	099-12-878-751	07/30/18 21:25


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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
Surr: 1,4-Bromofluorobenzene (68-120%)	98%			180730L031	099-12-878-751	07/30/18 21:25
Surr: Dibromofluoromethane (80-127%)	102%			180730L031	099-12-878-751	07/30/18 21:25
Surr: 1,2-Dichloroethane-d4 (80-128%)	99%			180730L031	099-12-878-751	07/30/18 21:25
Surr: Toluene-d8 (80-120%)	101%			180730L031	099-12-878-751	07/30/18 21:25

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Calscience

The difference is service

Client: Cardno	Work Order: 18-07-1590
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

**QUALITY CONTROL
Matrix Spike**

Analyte	Orig. Val.	MS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
EPA 300.0 Anions										
18-07-1456-3										
Sulfate	225.0	294.3	HX	mg/L	50.00	139	80-120	180723S01	18-07-1456-3	07/23/18 19:04
SM 4500-CL C Chloride										
18-07-1591-3										
Chloride	46.59	150.6		mg/L	100.0	104	80-120	I0724CLCS1	18-07-1591-3	07/24/18 18:00
EPA 6010B ICP Metals										
18-07-1591-1										
Arsenic	ND	0.5183		mg/L	0.5000	104	80-140	180730SA5	18-07-1591-1	08/03/18 15:36
Barium	0.05900	0.5690		mg/L	0.5000	102	87-123	180730SA5	18-07-1591-1	08/03/18 15:36
Cadmium	ND	0.4992		mg/L	0.5000	100	82-124	180730SA5	18-07-1591-1	08/03/18 15:36
Chromium	ND	0.5051		mg/L	0.5000	101	86-122	180730SA5	18-07-1591-1	08/03/18 15:36
Lead	ND	0.5154		mg/L	0.5000	103	84-120	180730SA5	18-07-1591-1	08/03/18 15:36
Selenium	ND	0.5244		mg/L	0.5000	105	79-127	180730SA5	18-07-1591-1	08/03/18 15:36
Silver	ND	0.02846	HX	mg/L	0.2500	11	86-128	180730SA5	18-07-1591-1	08/03/18 15:36
EPA 7470A Mercury										
18-07-1594-1										
Mercury	ND	0.008332		mg/L	0.01000	83	55-133	180802SA1	18-07-1594-1	08/02/18 14:41
EPA 8260B Volatile Organics										
18-07-1590-2										
Benzene	ND	0.01224		mg/L	0.01000	122	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Toluene	0.0007165	0.01264		mg/L	0.01000	119	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Ethylbenzene	ND	0.01100		mg/L	0.01000	110	75-125	180730S009	18-07-1590-2	07/30/18 22:49
o-Xylene	ND	0.01052		mg/L	0.01000	105	75-127	180730S009	18-07-1590-2	07/30/18 22:49
p/m-Xylene	ND	0.02122		mg/L	0.02000	106	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Methyl-t-Butyl Ether (MTBE)	ND	0.009436		mg/L	0.01000	94	71-131	180730S009	18-07-1590-2	07/30/18 22:49
1,1-Dichloroethene	ND	0.01263		mg/L	0.01000	126	66-126	180730S009	18-07-1590-2	07/30/18 22:49
1,2-Dibromoethane	ND	0.009876		mg/L	0.01000	99	75-126	180730S009	18-07-1590-2	07/30/18 22:49
1,2-Dichlorobenzene	ND	0.009692		mg/L	0.01000	97	75-125	180730S009	18-07-1590-2	07/30/18 22:49
1,2-Dichloroethane	ND	0.01130		mg/L	0.01000	113	75-127	180730S009	18-07-1590-2	07/30/18 22:49
Carbon Tetrachloride	ND	0.01205		mg/L	0.01000	121	69-135	180730S009	18-07-1590-2	07/30/18 22:49
Chlorobenzene	ND	0.01015		mg/L	0.01000	102	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Trichloroethene	ND	0.01176		mg/L	0.01000	118	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Vinyl Chloride	ND	0.01406		mg/L	0.01000	141	52-142	180730S009	18-07-1590-2	07/30/18 22:49

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Calscience

The difference is service

Client: Cardno	Work Order: 18-07-1590
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

QUALITY CONTROL Matrix Spike Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
EPA 300.0 Anions												
18-07-1456-3												
Sulfate	225.0	286.3	HX	mg/L	50.00	123	80-120	3	0-20	180723S01	18-07-1456-3	07/23/18 19:23
SM 4500-CL C Chloride												
18-07-1591-3												
Chloride	46.59	150.1		mg/L	100.0	103	80-120	0	0-25	10724CLCS1	18-07-1591-3	07/24/18 18:00
EPA 6010B ICP Metals												
18-07-1591-1												
Arsenic	ND	0.5016		mg/L	0.5000	100	80-140	3	0-11	180730SA5	18-07-1591-1	08/03/18 15:37
Barium	0.05900	0.5666		mg/L	0.5000	102	87-123	0	0-6	180730SA5	18-07-1591-1	08/03/18 15:37
Cadmium	ND	0.4994		mg/L	0.5000	100	82-124	0	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
Chromium	ND	0.5010		mg/L	0.5000	100	86-122	1	0-8	180730SA5	18-07-1591-1	08/03/18 15:37
Lead	ND	0.5147		mg/L	0.5000	103	84-120	0	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
Selenium	ND	0.5160		mg/L	0.5000	103	79-127	2	0-9	180730SA5	18-07-1591-1	08/03/18 15:37
Silver	ND	0.06513	HX,BA	mg/L	0.2500	26	86-128	78	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
EPA 7470A Mercury												
18-07-1594-1												
Mercury	ND	0.007775		mg/L	0.01000	78	55-133	7	0-20	180802SA1	18-07-1594-1	08/02/18 14:48
EPA 8260B Volatile Organics												
18-07-1590-2												
Benzene	ND	0.01248		mg/L	0.01000	125	75-125	2	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Toluene	0.0007165	0.01310		mg/L	0.01000	124	75-125	4	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Ethylbenzene	ND	0.01153		mg/L	0.01000	115	75-125	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
o-Xylene	ND	0.01103		mg/L	0.01000	110	75-127	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
p/m-Xylene	ND	0.02193		mg/L	0.02000	110	75-125	3	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Methyl-t-Butyl Ether (MTBE)	ND	0.01008		mg/L	0.01000	101	71-131	7	0-20	180730S009	18-07-1590-2	07/30/18 23:16
1,1-Dichloroethene	ND	0.01280	HX	mg/L	0.01000	128	66-126	1	0-20	180730S009	18-07-1590-2	07/30/18 23:16
1,2-Dibromoethane	ND	0.01043		mg/L	0.01000	104	75-126	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
1,2-Dichlorobenzene	ND	0.01015		mg/L	0.01000	102	75-125	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
1,2-Dichloroethane	ND	0.01167		mg/L	0.01000	117	75-127	3	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Carbon Tetrachloride	ND	0.01241		mg/L	0.01000	124	69-135	3	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Chlorobenzene	ND	0.01065		mg/L	0.01000	106	75-125	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Trichloroethene	ND	0.01225		mg/L	0.01000	122	75-125	4	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Vinyl Chloride	ND	0.01363		mg/L	0.01000	136	52-142	3	0-20	180730S009	18-07-1590-2	07/30/18 23:16

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Calscience

The difference is service

Client: Cardno	Work Order: 18-07-1590
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

QUALITY CONTROL
Post Digestion Spike

Analyte	Orig. Val.	PDS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
EPA 6010B ICP Metals										
18-07-1591-1										
Arsenic	ND	0.4856		mg/L	0.5000	97	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Barium	0.05900	0.5799		mg/L	0.5000	104	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Cadmium	ND	0.5102		mg/L	0.5000	102	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Chromium	ND	0.5095		mg/L	0.5000	102	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Lead	ND	0.5332		mg/L	0.5000	107	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Selenium	ND	0.5419		mg/L	0.5000	108	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Silver	ND	0.2234		mg/L	0.2500	89	75-125	180730SA5	18-07-1591-1	08/03/18 15:37

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Qual: Qualifiers



Calscience

The difference is service

Client:	Cardno	Work Order:	18-07-1590
	20505 Crescent Bay Drive	Project Name:	ExxonMobil Gladiola Station
	Lake Forest, CA 92630-8825	Date Received:	07/21/18

QUALITY CONTROL
Post Digestion Spike Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
EPA 6010B ICP Metals												
18-07-1591-1												
Arsenic	ND	0.4871		mg/L	0.5000	97	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Barium	0.05900	0.5823		mg/L	0.5000	105	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Cadmium	ND	0.5035		mg/L	0.5000	101	75-125	1	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Chromium	ND	0.5110		mg/L	0.5000	102	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Lead	ND	0.5142		mg/L	0.5000	103	75-125	4	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Selenium	ND	0.4838		mg/L	0.5000	97	75-125	11	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Silver	ND	0.2274		mg/L	0.2500	91	75-125	2	0-20	180730SA5	18-07-1591-1	08/03/18 15:38

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Qual - Qualifiers RPD: Relative Percent Difference

Client:	Cardno	Work Order:	18-07-1590
	20505 Crescent Bay Drive	Project Name:	ExxonMobil Gladiola Station
	Lake Forest, CA 92630-8825	Date Received:	07/21/18

QUALITY CONTROL
Sample Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
SM 2320B Alkalinity									
18-07-1456-3									
Alkalinity, Total (as CaCO3)	52.80	52.74		mg/L	0	0-25	I0723ALKD2	18-07-1456-3	07/24/18 02:19
SM 2540 C Total Dissolved Solids									
18-07-1456-3									
Solids, Total Dissolved	3370	3440		mg/L	2	0-20	I0724TDSD6	18-07-1456-3	07/24/18 18:00

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RPD: Relative Percent Difference.



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Client: Cardno	Work Order: 18-07-1590
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA

Laboratory Control Sample

Analyte	Known Val.	Analyzed	Qual.	Units	% Rec.	Target Range	Batch	Analysis Date/Time
EPA 300.0 Anions								
099-12-906-8656								
Sulfate	50.00	48.70		mg/L	97	90-110	180723L01	07/23/18 10:41
EPA 300.0 Anions								
099-12-906-8657								
Sulfate	50.00	48.37		mg/L	97	90-110	180724L02	07/24/18 20:34
SM 2320B Alkalinity								
099-17-086-8								
Alkalinity, Total (as CaCO ₃)	100.0	110.3		mg/L	110	80-120	10723ALKB2	07/24/18 02:19
SM 2540 C Total Dissolved Solids								
099-12-180-6309								
Solids, Total Dissolved	100.0	95.00		mg/L	95	80-120	10724TDSL3	07/24/18 18:00
SM 4500-CL C Chloride								
099-05-057-2222								
Chloride	100.0	100.6		mg/L	101	80-120	10724CLCL1	07/24/18 18:00
EPA 6010B ICP Metals								
097-01-003-16987								
Arsenic	0.5000	0.4415		mg/L	88	80-120	180730LA5	08/03/18 14:55
Barium	0.5000	0.5081		mg/L	102	80-120	180730LA5	08/03/18 14:55
Cadmium	0.5000	0.5186		mg/L	104	80-120	180730LA5	08/03/18 14:55
Chromium	0.5000	0.4881		mg/L	98	80-120	180730LA5	08/03/18 14:55
Lead	0.5000	0.5019		mg/L	100	80-120	180730LA5	08/03/18 14:55
Selenium	0.5000	0.4333		mg/L	87	80-120	180730LA5	08/03/18 14:55
Silver	0.2500	0.2235		mg/L	89	80-120	180730LA5	08/03/18 14:55
EPA 7470A Mercury								
099-12-457-382								
Mercury	0.01000	0.008974		mg/L	90	80-120	180802LA1M	08/02/18 14:37
EPA 8270C SIM PAHs								
099-06-008-1064								
Naphthalene	0.002000	0.001772		mg/L	89	21-133	180725L01	07/26/18 15:21
2-Methylnaphthalene	0.002000	0.001834		mg/L	92	21-140	180725L01	07/26/18 15:21
1-Methylnaphthalene	0.002000	0.001825		mg/L	91	20-140	180725L01	07/26/18 15:21
Acenaphthylene	0.002000	0.001684		mg/L	84	33-145	180725L01	07/26/18 15:21
Acenaphthene	0.002000	0.001755		mg/L	88	55-121	180725L01	07/26/18 15:21
Fluorene	0.002000	0.001827		mg/L	91	59-121	180725L01	07/26/18 15:21
Phenanthrene	0.002000	0.001956		mg/L	98	54-120	180725L01	07/26/18 15:21
Anthracene	0.002000	0.001907		mg/L	95	27-133	180725L01	07/26/18 15:21
Fluoranthene	0.002000	0.001974		mg/L	99	26-137	180725L01	07/26/18 15:21
Pyrene	0.002000	0.001940		mg/L	97	45-129	180725L01	07/26/18 15:21



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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA Laboratory Control Sample

Analyte	Known Val.	Analyzed	Qual.	Units	% Rec.	Target Range	Batch	Analysis Date/Time
Benzo (a) Anthracene	0.002000	0.001990		mg/L	100	33-143	180725L01	07/26/18 15:21
Chrysene	0.002000	0.001964		mg/L	98	17-168	180725L01	07/26/18 15:21
Benzo (k) Fluoranthene	0.002000	0.001965		mg/L	98	24-159	180725L01	07/26/18 15:21
Benzo (b) Fluoranthene	0.002000	0.002010		mg/L	100	24-159	180725L01	07/26/18 15:21
Benzo (a) Pyrene	0.002000	0.002048		mg/L	102	17-163	180725L01	07/26/18 15:21
Indeno (1,2,3-c,d) Pyrene	0.002000	0.001966		mg/L	98	25-175	180725L01	07/26/18 15:21
Dibenz (a,h) Anthracene	0.002000	0.001865		mg/L	93	25-175	180725L01	07/26/18 15:21
Benzo (g,h,i) Perylene	0.002000	0.002193		mg/L	110	25-157	180725L01	07/26/18 15:21

Total number of LCS compounds: 18
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

EPA 8260B Volatile Organics

099-12-878-751

Benzene	0.01000	0.01098		mg/L	110	80-120	180730L031	07/30/18 20:24
Toluene	0.01000	0.01083		mg/L	108	80-120	180730L031	07/30/18 20:24
Ethylbenzene	0.01000	0.009662		mg/L	97	80-120	180730L031	07/30/18 20:24
o-Xylene	0.01000	0.009707		mg/L	97	80-120	180730L031	07/30/18 20:24
p/m-Xylene	0.02000	0.01918		mg/L	96	80-120	180730L031	07/30/18 20:24
Methyl-t-Butyl Ether (MTBE)	0.01000	0.008923		mg/L	89	75-123	180730L031	07/30/18 20:24
1,1-Dichloroethene	0.01000	0.01026		mg/L	103	77-120	180730L031	07/30/18 20:24
1,2-Dibromoethane	0.01000	0.009278		mg/L	93	80-120	180730L031	07/30/18 20:24
1,2-Dichlorobenzene	0.01000	0.009419		mg/L	94	80-120	180730L031	07/30/18 20:24
1,2-Dichloroethane	0.01000	0.01063		mg/L	106	80-122	180730L031	07/30/18 20:24
Carbon Tetrachloride	0.01000	0.01024		mg/L	102	80-129	180730L031	07/30/18 20:24
Chlorobenzene	0.01000	0.009591		mg/L	96	80-120	180730L031	07/30/18 20:24
Trichloroethene	0.01000	0.01060		mg/L	106	80-120	180730L031	07/30/18 20:24
Vinyl Chloride	0.01000	0.01215		mg/L	122	63-135	180730L031	07/30/18 20:24

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1590
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA Laboratory Control Sample Duplicate

Analyte	LCS Val.	Duplicate	Qual.	Units	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
EPA 300.0 Anions											
099-12-906-8657											
Sulfate	50.00	47.26		mg/L	95	90-110	2	0-15	180724L02	099-12-906-8657	07/24/18 20:52
SM 2320B Alkalinity											
099-17-086-8											
Alkalinity, Total (as CaCO ₃)	100.0	106.5		mg/L	106	80-120	4	0-20	I0723ALKB2	099-17-086-8	07/24/18 02:19
SM 2540 C Total Dissolved Solids											
099-12-180-6309											
Solids, Total Dissolved	100.0	100.0		mg/L	100	80-120	5	0-20	I0724TDSL3	099-12-180-6309	07/24/18 18:00
SM 4500-CL C Chloride											
099-05-057-2222											
Chloride	100.0	100.1		mg/L	100	80-120	0	0-20	I0724CLCL1	099-05-057-2222	07/24/18 18:00
EPA 8270C SIM PAHs											
099-06-008-1064											
Naphthalene	0.00200 0	0.001763		mg/L	88	21-133	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
2-Methylnaphthalene	0.00200 0	0.001816		mg/L	91	21-140	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
1-Methylnaphthalene	0.00200 0	0.001826		mg/L	91	20-140	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Acenaphthylene	0.00200 0	0.001727		mg/L	86	33-145	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Acenaphthene	0.00200 0	0.001824		mg/L	91	55-121	4	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Fluorene	0.00200 0	0.001932		mg/L	97	59-121	6	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Phenanthrene	0.00200 0	0.001987		mg/L	99	54-120	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Anthracene	0.00200 0	0.001954		mg/L	98	27-133	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Fluoranthene	0.00200 0	0.001987		mg/L	99	26-137	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Pyrene	0.00200 0	0.001947		mg/L	97	45-129	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (a) Anthracene	0.00200 0	0.002008		mg/L	100	33-143	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Chrysene	0.00200 0	0.001995		mg/L	100	17-168	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (k) Fluoranthene	0.00200 0	0.001992		mg/L	100	24-159	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (b) Fluoranthene	0.00200 0	0.002051		mg/L	103	24-159	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (a) Pyrene	0.00200 0	0.002106		mg/L	105	17-163	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41

Qual - Qualifiers RPD: Relative Percent Difference



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Client: Cardno	Work Order: 18-07-1590
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA
Laboratory Control Sample Duplicate

Analyte	LCS Val.	Duplicate	Qual.	Units	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
Indeno (1,2,3-c,d) Pyrene	0.002000	0.002028		mg/L	101	25-175	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Dibenz (a,h) Anthracene	0.002000	0.002054		mg/L	103	25-175	10	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (g,h,i) Perylene	0.002000	0.002253		mg/L	113	25-157	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41

Total number of LCS compounds: 18
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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Qual - Qualifiers RPD: Relative Percent Difference



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Work Order: 18-07-1590

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Sample Analysis Summary Report

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 300.0	N/A	27	IC 7	1
EPA 6010B	EPA 3010A Total	1080	ICP 8300	1
EPA 7470A	EPA 7470A Total	868	Mercury 07	1
EPA 8260B	EPA 5030C	1162	GC/MS UU	2
EPA 8270C SIM PAHs	EPA 3510C	928	GC/MS EEE	1
SM 2320B	N/A	834	PCT 1	1
SM 2540 C	N/A	1136	N/A	1
SM 4500-CI C	N/A	1086	BUR02	1


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Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841



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Work Order: 18-07-1590

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Glossary of Terms and Qualifiers

Qualifiers	Definition
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stdns.
HO	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS was in control.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
SG	A silica gel cleanup procedure was performed.
SN	See applicable analysis comment.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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159.0

Do Not Lift Using This Tag

Recipient's Name <i>Please print.</i>	Phone Number
ORIGIN ID: H0BA (949) 457-8950 CARDINO 20505 CRESCENT BAY DR LAKE FOREST, CA 92630 UNITED STATES US	SHIP DATE: 20JUL18 ACTWGT: 57.80 LB CAD: 006994246/SSFE1904 DIMS: 15x15x15 IN BILL THIRD PARTY

TO

**EUROFINS CALSCIENCE INC
7440 LINCOLN WAY****GROVE CA 92841**(714)
THU:
PO:

REF:

DEPT:

**FedEx
Express**

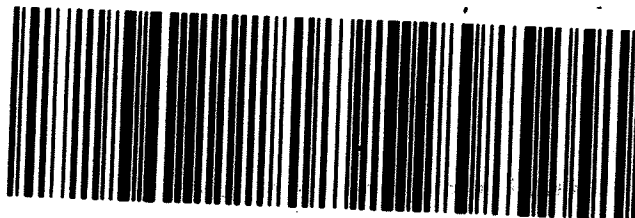
J1811118012601w

2 of 5

MPS# 7727 7903 7958
0263

Mstr# 7727 7903 7947

0201

XO APVA**SATURDAY 12:00P
PRIORITY OVERNIGHT****92841****CA-US SNA**

RT	138	3	B
ST	25	12:00	7958
			07.21



Calscience

WORK ORDER NUMBER: 18-07-7570

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1CLIENT: CardnoDATE: 07/21/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: -0.5°C); Temperature (w/o CF): 2.8 °C (w/ CF): 2.3 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 802

CUSTODY SEAL:

Cooler ☒ Present and Intact☐ Present but Not Intact☐ Not Present☐ N/AChecked by: 802Sample(s) ☐ Present and Intact☐ Present but Not Intact☒ Not Present☐ N/AChecked by: 778

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ Yes ☐ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☒ Yes ☐ No ☐ N/AContainer(s) for certain analysis free of headspace ☒ Yes ☐ No ☐ N/A☒ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: 180209B)Aqueous: ☐ VOA ☒ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☒ 125PB ☐ 125PB_{znna} (pH 9)☐ 250AGB ☐ 250CGB ☐ 250CGBs (pH 2) ☒ 250PB ☒ 250PB_n (pH 2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH 2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGBs (pH 2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PB_{na} (pH 12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 778s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOHReviewed by: 107



Calscience

**WORK ORDER NUMBER: 18-07-1594***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For**Client:** Cardno**Client Project Name:** ExxonMobil Gladiola Station**Attention:** David Purdy
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825Approved for release on 08/06/2018 by:
Cecile deGuia
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



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Work Order Number: 18-07-1594

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Work Order: 18-07-1594

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Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/21/18. They were assigned to Work Order 18-07-1594.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.


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The difference is service

Client: Cardno	Work Order: 18-07-1594
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	PO Number:
	Date/Time Received: 07/21/18 11:30
	Number of Containers: 23
Attn: David Purdy	

Sample Summary

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-41-MW22	18-07-1594-1	07/18/18 15:55	11	Aqueous
W-40-MW11	18-07-1594-2	07/18/18 13:00	11	Aqueous
TRIP BLANK	18-07-1594-3	07/18/18 00:00	1	Aqueous

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Client: Cardno	Work Order: 18-07-1594
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18
Attn: David Purdy	

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: 1 (W-41-MW22, Aqueous) Sampled: 07/18/18 15:55									
EPA 300.0 Anions (Extraction Method: N/A) Container - F									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Sulfate	19		mg/L	0.49	1.0	1.00	07/23/18 20:52	EPA 300.0	180723L01
SM 2320B Alkalinity (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Alkalinity, Total (as CaCO3)	240		mg/L	1.7	5.0	1.00	07/24/18 02:19	SM 2320B	I0723ALKB2
SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Solids, Total Dissolved	615		mg/L	0.870	1.00	1.00	07/24/18 16:00	SM 2540 C	I0724TDSL2
SM 4500-CL C Chloride (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Chloride	34		mg/L	0.76	2.0	1.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Arsenic	0.0236		mg/L	0.00438	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Barium	0.0223		mg/L	0.00296	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Cadmium	ND		mg/L	0.00269	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Chromium	ND		mg/L	0.00271	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Lead	ND		mg/L	0.00406	0.0100	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Selenium	0.0432		mg/L	0.00699	0.0150	1.00	08/03/18 15:51	EPA 6010B	180730LA5
Silver	ND		mg/L	0.00139	0.00500	1.00	08/03/18 15:51	EPA 6010B	180730LA5
EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Mercury	0.000161	B,J	mg/L	0.000045 3	0.000200	1.00	08/02/18 14:39	EPA 7470A	180802LA1M
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - J									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Naphthalene	ND		ug/L	0.071	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
2-Methylnaphthalene	ND		ug/L	0.072	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	ND		ug/L	0.072	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Acenaphthylene	ND		ug/L	0.071	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Acenaphthene	ND		ug/L	0.058	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Fluorene	ND		ug/L	0.070	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Phenanthrene	ND		ug/L	0.065	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		ug/L	0.065	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01



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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Fluoranthene	ND		ug/L	0.071	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		ug/L	0.069	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		ug/L	0.075	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Chrysene	ND		ug/L	0.064	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		ug/L	0.077	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		ug/L	0.082	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Benzo (a) Pyrene	ND		ug/L	0.098	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		ug/L	0.079	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		ug/L	0.074	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		ug/L	0.092	0.19	1.00	07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	87%						07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	85%						07/26/18 21:28	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	91%						07/26/18 21:28	EPA 8270C SIM PAHs	180725L01

EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - B

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Benzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Toluene	0.41	J	ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Ethylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
o-Xylene	ND		ug/L	0.32	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
p/m-Xylene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Xylenes (total)	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Methyl-t-Butyl Ether (MTBE)	ND		ug/L	0.20	1.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/L	0.24	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,1-Dichloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,1-Dichloroethene	ND		ug/L	0.28	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,1-Dichloropropene	ND		ug/L	0.30	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,2,3-Trichloropropane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031



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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
c-1,2-Dichloroethene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,2-Dibromo-3-Chloropropane	ND		ug/L	2.0	5.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,2-Dibromoethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,2-Dichloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,2-Dichloropropane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
t-1,2-Dichloroethene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
c-1,3-Dichloropropene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,3-Dichlorobenzene	ND		ug/L	0.28	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,3-Dichloropropane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
t-1,3-Dichloropropene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
2,2-Dichloropropane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
2-Chlorotoluene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
4-Chlorotoluene	ND		ug/L	0.36	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
4-Methyl-2-Pentanone	ND		ug/L	2.0	5.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
Acetone	ND		ug/L	4.0	10	1.00	07/31/18 05:28	EPA 8260B	180730L031
Bromobenzene	ND		ug/L	0.32	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Bromochloromethane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
Bromoform	ND		ug/L	0.25	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Bromomethane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
Carbon Disulfide	ND		ug/L	0.40	1.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
Carbon Tetrachloride	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Chlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Dibromochloromethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Chloroethane	ND		ug/L	0.32	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Chloroform	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Chloromethane	ND		ug/L	0.29	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Dibromomethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Bromodichloromethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Dichlorodifluoromethane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
Hexachloro-1,3-Butadiene	ND		ug/L	0.80	2.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
Isopropylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
2-Butanone	ND		ug/L	2.0	5.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
Methylene Chloride	ND		ug/L	0.80	1.0	1.00	07/31/18 05:28	EPA 8260B	180730L031
2-Hexanone	ND		ug/L	4.0	10	1.00	07/31/18 05:28	EPA 8260B	180730L031
Naphthalene	ND		ug/L	0.40	10	1.00	07/31/18 05:28	EPA 8260B	180730L031
n-Butylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
n-Propylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
p-Isopropyltoluene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
sec-Butylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Styrene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
tert-Butylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Tetrachloroethene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Trichloroethene	ND		ug/L	0.29	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Trichlorofluoromethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Vinyl Chloride	ND		ug/L	0.20	0.50	1.00	07/31/18 05:28	EPA 8260B	180730L031
Surr: 1,4-Bromofluorobenzene (68-120%)	98%						07/31/18 05:28	EPA 8260B	180730L031
Surr: Dibromofluoromethane (80-127%)	107%						07/31/18 05:28	EPA 8260B	180730L031
Surr: 1,2-Dichloroethane-d4 (80-128%)	108%						07/31/18 05:28	EPA 8260B	180730L031
Surr: Toluene-d8 (80-120%)	103%						07/31/18 05:28	EPA 8260B	180730L031
Sample ID: 2 (W-40-MW11, Aqueous) Sampled: 07/18/18 13:00									
EPA 300.0 Anions (Extraction Method: N/A) Container - F									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Sulfate	68		mg/L	0.49	1.0	1.00	07/23/18 21:11	EPA 300.0	180723L01
SM 2320B Alkalinity (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Alkalinity, Total (as CaCO3)	440		mg/L	1.7	5.0	1.00	07/24/18 02:19	SM 2320B	I0723ALKB2
SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Solids, Total Dissolved	1040		mg/L	0.870	10.0	1.00	07/24/18 16:00	SM 2540 C	I0724TDSL2
SM 4500-CL C Chloride (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Chloride	170		mg/L	0.76	2.0	1.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Arsenic	0.00561	J	mg/L	0.00438	0.0100	1.00	08/03/18 15:52	EPA 6010B	180730LA5
Barium	0.0445		mg/L	0.00296	0.0100	1.00	08/03/18 15:52	EPA 6010B	180730LA5
Cadmium	ND		mg/L	0.00269	0.0100	1.00	08/03/18 15:52	EPA 6010B	180730LA5
Chromium	ND		mg/L	0.00271	0.0100	1.00	08/03/18 15:52	EPA 6010B	180730LA5
Lead	ND		mg/L	0.00406	0.0100	1.00	08/03/18 15:52	EPA 6010B	180730LA5
Selenium	ND		mg/L	0.00699	0.0150	1.00	08/03/18 15:52	EPA 6010B	180730LA5
Silver	0.00260	J	mg/L	0.00139	0.00500	1.00	08/03/18 15:52	EPA 6010B	180730LA5
EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Mercury	0.000163	B,J	mg/L	0.000045 3	0.000200	1.00	08/02/18 14:50	EPA 7470A	180802LA1M
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - J									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Naphthalene	ND		ug/L	0.071	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01



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20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
2-Methylnaphthalene	ND		ug/L	0.072	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	ND		ug/L	0.072	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Acenaphthylene	ND		ug/L	0.071	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Acenaphthene	ND		ug/L	0.058	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Fluorene	ND		ug/L	0.070	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Phenanthrene	ND		ug/L	0.065	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		ug/L	0.065	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Fluoranthene	ND		ug/L	0.071	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		ug/L	0.069	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		ug/L	0.075	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Chrysene	ND		ug/L	0.064	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		ug/L	0.077	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		ug/L	0.082	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Benzo (a) Pyrene	ND		ug/L	0.098	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		ug/L	0.079	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		ug/L	0.074	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		ug/L	0.092	0.19	1.00	07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	67%						07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	81%						07/26/18 21:48	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	85%						07/26/18 21:48	EPA 8270C SIM PAHs	180725L01

EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - B

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Benzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Toluene	0.50	J	ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Ethylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
o-Xylene	ND		ug/L	0.32	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
p/m-Xylene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Xylenes (total)	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Methyl-t-Butyl Ether (MTBE)	ND		ug/L	0.20	1.0	1.00	07/31/18 05:54	EPA 8260B	180730L031



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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/L	0.24	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,1-Dichloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,1-Dichloroethene	ND		ug/L	0.28	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,1-Dichloropropene	ND		ug/L	0.30	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,2,3-Trichloropropane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
c-1,2-Dichloroethene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,2-Dibromo-3-Chloropropane	ND		ug/L	2.0	5.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,2-Dibromoethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,2-Dichloroethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,2-Dichloropropane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
t-1,2-Dichloroethene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
c-1,3-Dichloropropene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,3-Dichlorobenzene	ND		ug/L	0.28	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,3-Dichloropropane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
t-1,3-Dichloropropene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
2,2-Dichloropropane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
2-Chlorotoluene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
4-Chlorotoluene	ND		ug/L	0.36	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
4-Methyl-2-Pentanone	ND		ug/L	2.0	5.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
Acetone	ND		ug/L	4.0	10	1.00	07/31/18 05:54	EPA 8260B	180730L031
Bromobenzene	ND		ug/L	0.32	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Bromochloromethane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
Bromoform	ND		ug/L	0.25	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Bromomethane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
Carbon Disulfide	ND		ug/L	0.40	1.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
Carbon Tetrachloride	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Chlorobenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Dibromochloromethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Chloroethane	ND		ug/L	0.32	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Chloroform	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Chloromethane	ND		ug/L	0.29	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Dibromomethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Bromodichloromethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Dichlorodifluoromethane	ND		ug/L	0.40	1.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
Hexachloro-1,3-Butadiene	ND		ug/L	0.80	2.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
Isopropylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
2-Butanone	ND		ug/L	2.0	5.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
Methylene Chloride	ND		ug/L	0.80	1.0	1.00	07/31/18 05:54	EPA 8260B	180730L031
2-Hexanone	ND		ug/L	4.0	10	1.00	07/31/18 05:54	EPA 8260B	180730L031
Naphthalene	ND		ug/L	0.40	10	1.00	07/31/18 05:54	EPA 8260B	180730L031
n-Butylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
n-Propylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
p-Isopropyltoluene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
sec-Butylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Styrene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
tert-Butylbenzene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Tetrachloroethene	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Trichloroethene	ND		ug/L	0.29	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Trichlorofluoromethane	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Vinyl Chloride	ND		ug/L	0.20	0.50	1.00	07/31/18 05:54	EPA 8260B	180730L031
Surr: 1,4-Bromofluorobenzene (68-120%)	97%						07/31/18 05:54	EPA 8260B	180730L031
Surr: Dibromofluoromethane (80-127%)	106%						07/31/18 05:54	EPA 8260B	180730L031
Surr: 1,2-Dichloroethane-d4 (80-128%)	103%						07/31/18 05:54	EPA 8260B	180730L031
Surr: Toluene-d8 (80-120%)	103%						07/31/18 05:54	EPA 8260B	180730L031

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Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
EPA 300.0 Anions						
099-12-906-8665						
Sulfate	ND		mg/L	180723L01	099-12-906-8665	07/23/18 10:26
SM 2320B Alkalinity						
099-17-086-19						
Alkalinity, Total (as CaCO3)	ND		mg/L	I0723ALKB2	099-17-086-19	07/24/18 02:19
SM 2540 C Total Dissolved Solids						
099-12-180-6308						
Solids, Total Dissolved	ND		mg/L	I0724TDSL2	099-12-180-6308	07/24/18 16:00
SM 4500-CL C Chloride						
099-05-057-2222						
Chloride	ND		mg/L	I0724CLCL1	099-05-057-2222	07/24/18 18:00
EPA 6010B ICP Metals						
097-01-003-16987						
Arsenic	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Barium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Cadmium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Chromium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Lead	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Selenium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Silver	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
EPA 7470A Mercury						
099-12-457-382						
Mercury	0.0000644	J	mg/L	180802LA1M	099-12-457-382	08/02/18 14:34
EPA 8270C SIM PAHs						
099-06-008-1064						
Naphthalene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
2-Methylnaphthalene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
1-Methylnaphthalene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Acenaphthylene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Acenaphthene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Fluorene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Phenanthrene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Anthracene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Fluoranthene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Pyrene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (a) Anthracene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Chrysene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00



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Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
Benzo (k) Fluoranthene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (b) Fluoranthene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (a) Pyrene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Indeno (1,2,3-c,d) Pyrene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Dibenz (a,h) Anthracene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (g,h,i) Perylene	ND		ug/L	180725L01	099-06-008-1064	07/26/18 15:00
Surr: Nitrobenzene-d5 (28-139%)	85%			180725L01	099-06-008-1064	07/26/18 15:00
Surr: 2-Fluorobiphenyl (33-144%)	84%			180725L01	099-06-008-1064	07/26/18 15:00
Surr: p-Terphenyl-d14 (23-160%)	93%			180725L01	099-06-008-1064	07/26/18 15:00

EPA 8260B Volatile Organics

099-12-878-751

Benzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Toluene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Ethylbenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
o-Xylene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
p/m-Xylene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Xylenes (total)	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Methyl-t-Butyl Ether (MTBE)	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,1,2-Tetrachloroethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,1-Trichloroethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,2,2-Tetrachloroethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,2-Trichloroethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,1-Dichloroethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,1-Dichloroethene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,1-Dichloropropene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,2,3-Trichlorobenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,2,3-Trichloropropane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,2,4-Trichlorobenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,2,4-Trimethylbenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,3,5-Trimethylbenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
c-1,2-Dichloroethene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dibromo-3-Chloropropane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dibromoethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dichlorobenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dichloroethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,2-Dichloropropane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
t-1,2-Dichloroethene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
c-1,3-Dichloropropene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,3-Dichlorobenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25

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Lake Forest, CA 92630-8825

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Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
1,3-Dichloropropane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
t-1,3-Dichloropropene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
1,4-Dichlorobenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
2,2-Dichloropropane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
2-Chlorotoluene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
4-Chlorotoluene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
4-Methyl-2-Pentanone	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Acetone	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Bromobenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Bromochloromethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Bromoform	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Bromomethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Carbon Disulfide	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Carbon Tetrachloride	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Chlorobenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Dibromochloromethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Chloroethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Chloroform	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Chloromethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Dibromomethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Bromodichloromethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Dichlorodifluoromethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Hexachloro-1,3-Butadiene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Isopropylbenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
2-Butanone	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Methylene Chloride	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
2-Hexanone	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Naphthalene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
n-Butylbenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
n-Propylbenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
p-Isopropyltoluene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
sec-Butylbenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Styrene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
tert-Butylbenzene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Tetrachloroethene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Trichloroethene	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Trichlorofluoromethane	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Vinyl Chloride	ND		ug/L	180730L031	099-12-878-751	07/30/18 21:25
Surr: 1,4-Bromofluorobenzene (68-120%)	98%			180730L031	099-12-878-751	07/30/18 21:25
Surr: Dibromofluoromethane (80-127%)	102%			180730L031	099-12-878-751	07/30/18 21:25
Surr: 1,2-Dichloroethane-d4 (80-128%)	99%			180730L031	099-12-878-751	07/30/18 21:25

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The difference is service

Client: Cardno	Work Order: 18-07-1594
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18
Attn: David Purdy	

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
Surr: Toluene-d8 (80-120%)	101%			180730L031	099-12-878-751	07/30/18 21:25

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

QUALITY CONTROL Matrix Spike

Analyte	Orig. Val.	MS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
EPA 300.0 Anions										
18-07-1549-8										
Sulfate	68.80	130.9	HX	mg/L	50.00	124	80-120	180723S01	18-07-1549-8	07/23/18 15:59
SM 4500-CL C Chloride										
18-07-1591-3										
Chloride	46.59	150.6		mg/L	100.0	104	80-120	I0724CLCS1	18-07-1591-3	07/24/18 18:00
EPA 6010B ICP Metals										
18-07-1591-1										
Arsenic	ND	0.5183		mg/L	0.5000	104	80-140	180730SA5	18-07-1591-1	08/03/18 15:36
Barium	0.05900	0.5690		mg/L	0.5000	102	87-123	180730SA5	18-07-1591-1	08/03/18 15:36
Cadmium	ND	0.4992		mg/L	0.5000	100	82-124	180730SA5	18-07-1591-1	08/03/18 15:36
Chromium	ND	0.5051		mg/L	0.5000	101	86-122	180730SA5	18-07-1591-1	08/03/18 15:36
Lead	ND	0.5154		mg/L	0.5000	103	84-120	180730SA5	18-07-1591-1	08/03/18 15:36
Selenium	ND	0.5244		mg/L	0.5000	105	79-127	180730SA5	18-07-1591-1	08/03/18 15:36
Silver	ND	0.02846	HX	mg/L	0.2500	11	86-128	180730SA5	18-07-1591-1	08/03/18 15:36
EPA 7470A Mercury										
18-07-1594-1										
Mercury	ND	0.008332		mg/L	0.01000	83	55-133	180802SA1	18-07-1594-1	08/02/18 14:41
EPA 8260B Volatile Organics										
18-07-1590-2										
Benzene	ND	12.24		ug/L	10.00	122	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Toluene	0.7165	12.64		ug/L	10.00	119	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Ethylbenzene	ND	11.00		ug/L	10.00	110	75-125	180730S009	18-07-1590-2	07/30/18 22:49
o-Xylene	ND	10.52		ug/L	10.00	105	75-127	180730S009	18-07-1590-2	07/30/18 22:49
p/m-Xylene	ND	21.22		ug/L	20.00	106	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Methyl-t-Butyl Ether (MTBE)	ND	9.436		ug/L	10.00	94	71-131	180730S009	18-07-1590-2	07/30/18 22:49
Tert-Butyl Alcohol (TBA)	ND	65.84		ug/L	50.00	132	20-180	180730S009	18-07-1590-2	07/30/18 22:49
Diisopropyl Ether (DIPE)	ND	11.75		ug/L	10.00	118	64-136	180730S009	18-07-1590-2	07/30/18 22:49
Ethyl-t-Butyl Ether (ETBE)	ND	10.20		ug/L	10.00	102	73-133	180730S009	18-07-1590-2	07/30/18 22:49
Tert-Amyl-Methyl Ether (TAME)	ND	10.24		ug/L	10.00	102	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Ethanol	ND	124.0		ug/L	100.0	124	73-139	180730S009	18-07-1590-2	07/30/18 22:49
1,1-Dichloroethene	ND	12.63		ug/L	10.00	126	66-126	180730S009	18-07-1590-2	07/30/18 22:49
1,2-Dibromoethane	ND	9.876		ug/L	10.00	99	75-126	180730S009	18-07-1590-2	07/30/18 22:49
1,2-Dichlorobenzene	ND	9.692		ug/L	10.00	97	75-125	180730S009	18-07-1590-2	07/30/18 22:49
1,2-Dichloroethane	ND	11.30		ug/L	10.00	113	75-127	180730S009	18-07-1590-2	07/30/18 22:49
Carbon Tetrachloride	ND	12.05		ug/L	10.00	121	69-135	180730S009	18-07-1590-2	07/30/18 22:49
Chlorobenzene	ND	10.15		ug/L	10.00	102	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Trichloroethene	ND	11.76		ug/L	10.00	118	75-125	180730S009	18-07-1590-2	07/30/18 22:49
Vinyl Chloride	ND	14.06		ug/L	10.00	141	52-142	180730S009	18-07-1590-2	07/30/18 22:49

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

**QUALITY CONTROL
Matrix Spike Duplicate**

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
EPA 300.0 Anions												
18-07-1549-8												
Sulfate	68.80	131.3	HX	mg/L	50.00	125	80-120	0	0-20	180723S01	18-07-1549-8	07/23/18 16:18
SM 4500-CL C Chloride												
18-07-1591-3												
Chloride	46.59	150.1		mg/L	100.0	103	80-120	0	0-25	I0724CLCS1	18-07-1591-3	07/24/18 18:00
EPA 6010B ICP Metals												
18-07-1591-1												
Arsenic	ND	0.5016		mg/L	0.5000	100	80-140	3	0-11	180730SA5	18-07-1591-1	08/03/18 15:37
Barium	0.05900	0.5666		mg/L	0.5000	102	87-123	0	0-6	180730SA5	18-07-1591-1	08/03/18 15:37
Cadmium	ND	0.4994		mg/L	0.5000	100	82-124	0	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
Chromium	ND	0.5010		mg/L	0.5000	100	86-122	1	0-8	180730SA5	18-07-1591-1	08/03/18 15:37
Lead	ND	0.5147		mg/L	0.5000	103	84-120	0	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
Selenium	ND	0.5160		mg/L	0.5000	103	79-127	2	0-9	180730SA5	18-07-1591-1	08/03/18 15:37
Silver	ND	0.06513	HX,BA	mg/L	0.2500	26	86-128	78	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
EPA 7470A Mercury												
18-07-1594-1												
Mercury	ND	0.007775		mg/L	0.01000	78	55-133	7	0-20	180802SA1	18-07-1594-1	08/02/18 14:48
EPA 8260B Volatile Organics												
18-07-1590-2												
Benzene	ND	12.48		ug/L	10.00	125	75-125	2	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Toluene	0.7165	13.10		ug/L	10.00	124	75-125	4	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Ethylbenzene	ND	11.53		ug/L	10.00	115	75-125	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
o-Xylene	ND	11.03		ug/L	10.00	110	75-127	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
p/m-Xylene	ND	21.93		ug/L	20.00	110	75-125	3	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Methyl-t-Butyl Ether (MTBE)	ND	10.08		ug/L	10.00	101	71-131	7	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Tert-Butyl Alcohol (TBA)	ND	56.42		ug/L	50.00	113	20-180	15	0-40	180730S009	18-07-1590-2	07/30/18 23:16
Diisopropyl Ether (DIPE)	ND	12.43		ug/L	10.00	124	64-136	6	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Ethyl-t-Butyl Ether (ETBE)	ND	10.77		ug/L	10.00	108	73-133	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Tert-Amyl-Methyl Ether (TAME)	ND	10.81		ug/L	10.00	108	75-125	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Ethanol	ND	88.17	BA	ug/L	100.0	88	73-139	34	0-27	180730S009	18-07-1590-2	07/30/18 23:16
1,1-Dichloroethene	ND	12.80	HX	ug/L	10.00	128	66-126	1	0-20	180730S009	18-07-1590-2	07/30/18 23:16
1,2-Dibromoethane	ND	10.43		ug/L	10.00	104	75-126	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
1,2-Dichlorobenzene	ND	10.15		ug/L	10.00	102	75-125	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
1,2-Dichloroethane	ND	11.67		ug/L	10.00	117	75-127	3	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Carbon Tetrachloride	ND	12.41		ug/L	10.00	124	69-135	3	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Chlorobenzene	ND	10.65		ug/L	10.00	106	75-125	5	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Trichloroethene	ND	12.25		ug/L	10.00	122	75-125	4	0-20	180730S009	18-07-1590-2	07/30/18 23:16
Vinyl Chloride	ND	13.63		ug/L	10.00	136	52-142	3	0-20	180730S009	18-07-1590-2	07/30/18 23:16



Calscience

The difference is service

Client: Cardno	Work Order: 18-07-1594
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

QUALITY CONTROL
Post Digestion Spike

Analyte	Orig. Val.	PDS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
EPA 6010B ICP Metals										
18-07-1591-1										
Arsenic	ND	0.4856		mg/L	0.5000	97	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Barium	0.05900	0.5799		mg/L	0.5000	104	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Cadmium	ND	0.5102		mg/L	0.5000	102	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Chromium	ND	0.5095		mg/L	0.5000	102	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Lead	ND	0.5332		mg/L	0.5000	107	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Selenium	ND	0.5419		mg/L	0.5000	108	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Silver	ND	0.2234		mg/L	0.2500	89	75-125	180730SA5	18-07-1591-1	08/03/18 15:37

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Qual: Qualifiers



The difference is service

Client:	Cardno	Work Order:	18-07-1594
	20505 Crescent Bay Drive	Project Name:	ExxonMobil Gladiola Station
	Lake Forest, CA 92630-8825	Date Received:	07/21/18

QUALITY CONTROL
Post Digestion Spike Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
EPA 6010B ICP Metals												
18-07-1591-1												
Arsenic	ND	0.4871		mg/L	0.5000	97	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Barium	0.05900	0.5823		mg/L	0.5000	105	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Cadmium	ND	0.5035		mg/L	0.5000	101	75-125	1	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Chromium	ND	0.5110		mg/L	0.5000	102	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Lead	ND	0.5142		mg/L	0.5000	103	75-125	4	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Selenium	ND	0.4838		mg/L	0.5000	97	75-125	11	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Silver	ND	0.2274		mg/L	0.2500	91	75-125	2	0-20	180730SA5	18-07-1591-1	08/03/18 15:38

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Qual - Qualifiers RPD: Relative Percent Difference

Client:	Cardno	Work Order:	18-07-1594
	20505 Crescent Bay Drive	Project Name:	ExxonMobil Gladiola Station
	Lake Forest, CA 92630-8825	Date Received:	07/21/18

QUALITY CONTROL
Sample Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
SM 2320B Alkalinity									
18-07-1456-3									
Alkalinity, Total (as CaCO3)	52.80	52.74		mg/L	0	0-25	I0723ALKD2	18-07-1456-3	07/24/18 02:19
SM 2540 C Total Dissolved Solids									
18-07-1387-6									
Solids, Total Dissolved	32020	32040		mg/L	0	0-20	I0724TDSD4	18-07-1387-6	07/24/18 16:00

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RPD: Relative Percent Difference.



Calscience

The difference is service

Client: Cardno	Work Order: 18-07-1594
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA

Laboratory Control Sample

Analyte	Known Val.	Analyzed	Qual.	Units	% Rec.	Target Range	Batch	Analysis Date/Time
EPA 300.0 Anions								
099-12-906-8665								
Sulfate	50.00	48.74		mg/L	97	90-110	180723L01	07/23/18 10:45
SM 2320B Alkalinity								
099-17-086-19								
Alkalinity, Total (as CaCO ₃)	100.0	110.3		mg/L	110	80-120	10723ALKB2	07/24/18 02:19
SM 2540 C Total Dissolved Solids								
099-12-180-6308								
Solids, Total Dissolved	100.0	95.00		mg/L	95	80-120	10724TDSL2	07/24/18 16:00
SM 4500-CL C Chloride								
099-05-057-2222								
Chloride	100.0	100.6		mg/L	101	80-120	10724CLCL1	07/24/18 18:00
EPA 6010B ICP Metals								
097-01-003-16987								
Arsenic	0.5000	0.4415		mg/L	88	80-120	180730LA5	08/03/18 14:55
Barium	0.5000	0.5081		mg/L	102	80-120	180730LA5	08/03/18 14:55
Cadmium	0.5000	0.5186		mg/L	104	80-120	180730LA5	08/03/18 14:55
Chromium	0.5000	0.4881		mg/L	98	80-120	180730LA5	08/03/18 14:55
Lead	0.5000	0.5019		mg/L	100	80-120	180730LA5	08/03/18 14:55
Selenium	0.5000	0.4333		mg/L	87	80-120	180730LA5	08/03/18 14:55
Silver	0.2500	0.2235		mg/L	89	80-120	180730LA5	08/03/18 14:55
EPA 7470A Mercury								
099-12-457-382								
Mercury	0.01000	0.008974		mg/L	90	80-120	180802LA1M	08/02/18 14:37
EPA 8270C SIM PAHs								
099-06-008-1064								
Naphthalene	2.000	1.772		ug/L	89	21-133	180725L01	07/26/18 15:21
2-Methylnaphthalene	2.000	1.834		ug/L	92	21-140	180725L01	07/26/18 15:21
1-Methylnaphthalene	2.000	1.825		ug/L	91	20-140	180725L01	07/26/18 15:21
Acenaphthylene	2.000	1.684		ug/L	84	33-145	180725L01	07/26/18 15:21
Acenaphthene	2.000	1.755		ug/L	88	55-121	180725L01	07/26/18 15:21
Fluorene	2.000	1.827		ug/L	91	59-121	180725L01	07/26/18 15:21
Phenanthrene	2.000	1.956		ug/L	98	54-120	180725L01	07/26/18 15:21
Anthracene	2.000	1.907		ug/L	95	27-133	180725L01	07/26/18 15:21
Fluoranthene	2.000	1.974		ug/L	99	26-137	180725L01	07/26/18 15:21
Pyrene	2.000	1.940		ug/L	97	45-129	180725L01	07/26/18 15:21
Benzo (a) Anthracene	2.000	1.990		ug/L	100	33-143	180725L01	07/26/18 15:21
Chrysene	2.000	1.964		ug/L	98	17-168	180725L01	07/26/18 15:21
Benzo (k) Fluoranthene	2.000	1.965		ug/L	98	24-159	180725L01	07/26/18 15:21

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA Laboratory Control Sample

Analyte	Known Val.	Analyzed	Qual.	Units	% Rec.	Target Range	Batch	Analysis Date/Time
Benzo (b) Fluoranthene	2.000	2.010		ug/L	100	24-159	180725L01	07/26/18 15:21
Benzo (a) Pyrene	2.000	2.048		ug/L	102	17-163	180725L01	07/26/18 15:21
Indeno (1,2,3-c,d) Pyrene	2.000	1.966		ug/L	98	25-175	180725L01	07/26/18 15:21
Dibenz (a,h) Anthracene	2.000	1.865		ug/L	93	25-175	180725L01	07/26/18 15:21
Benzo (g,h,i) Perylene	2.000	2.193		ug/L	110	25-157	180725L01	07/26/18 15:21

Total number of LCS compounds: 18
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

EPA 8260B Volatile Organics

099-12-878-751

Benzene	10.00	10.98		ug/L	110	80-120	180730L031	07/30/18 20:24
Toluene	10.00	10.83		ug/L	108	80-120	180730L031	07/30/18 20:24
Ethylbenzene	10.00	9.662		ug/L	97	80-120	180730L031	07/30/18 20:24
o-Xylene	10.00	9.707		ug/L	97	80-120	180730L031	07/30/18 20:24
p/m-Xylene	20.00	19.18		ug/L	96	80-120	180730L031	07/30/18 20:24
Methyl-t-Butyl Ether (MTBE)	10.00	8.923		ug/L	89	75-123	180730L031	07/30/18 20:24
Tert-Butyl Alcohol (TBA)	50.00	57.66		ug/L	115	80-120	180730L031	07/30/18 20:24
Diisopropyl Ether (DIPE)	10.00	11.05		ug/L	110	73-121	180730L031	07/30/18 20:24
Ethyl-t-Butyl Ether (ETBE)	10.00	9.364		ug/L	94	76-124	180730L031	07/30/18 20:24
Tert-Amyl-Methyl Ether (TAME)	10.00	9.526		ug/L	95	80-120	180730L031	07/30/18 20:24
Ethanol	100.0	135.1	LQ,RU	ug/L	135	73-133	180730L031	07/30/18 20:24
1,1-Dichloroethene	10.00	10.26		ug/L	103	77-120	180730L031	07/30/18 20:24
1,2-Dibromoethane	10.00	9.278		ug/L	93	80-120	180730L031	07/30/18 20:24
1,2-Dichlorobenzene	10.00	9.419		ug/L	94	80-120	180730L031	07/30/18 20:24
1,2-Dichloroethane	10.00	10.63		ug/L	106	80-122	180730L031	07/30/18 20:24
Carbon Tetrachloride	10.00	10.24		ug/L	102	80-129	180730L031	07/30/18 20:24
Chlorobenzene	10.00	9.591		ug/L	96	80-120	180730L031	07/30/18 20:24
Trichloroethene	10.00	10.60		ug/L	106	80-120	180730L031	07/30/18 20:24
Vinyl Chloride	10.00	12.15		ug/L	122	63-135	180730L031	07/30/18 20:24

Total number of LCS compounds: 19
Total number of ME compounds: 1
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1594
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA Laboratory Control Sample Duplicate

Analyte	LCS Val.	Duplicate	Qual.	Units	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
SM 2320B Alkalinity											
099-17-086-19											
Alkalinity, Total (as CaCO ₃)	100.0	106.5		mg/L	106	80-120	4	0-20	I0723ALKB2	099-17-086-19	07/24/18 02:19
SM 2540 C Total Dissolved Solids											
099-12-180-6308											
Solids, Total Dissolved	100.0	90.00		mg/L	90	80-120	5	0-20	I0724TDSL2	099-12-180-6308	07/24/18 16:00
SM 4500-CL C Chloride											
099-05-057-2222											
Chloride	100.0	100.1		mg/L	100	80-120	0	0-20	I0724CLCL1	099-05-057-2222	07/24/18 18:00
EPA 8270C SIM PAHs											
099-06-008-1064											
Naphthalene	2.000	1.763		ug/L	88	21-133	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
2-Methylnaphthalene	2.000	1.816		ug/L	91	21-140	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
1-Methylnaphthalene	2.000	1.826		ug/L	91	20-140	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Acenaphthylene	2.000	1.727		ug/L	86	33-145	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Acenaphthene	2.000	1.824		ug/L	91	55-121	4	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Fluorene	2.000	1.932		ug/L	97	59-121	6	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Phenanthrene	2.000	1.987		ug/L	99	54-120	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Anthracene	2.000	1.954		ug/L	98	27-133	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Fluoranthene	2.000	1.987		ug/L	99	26-137	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Pyrene	2.000	1.947		ug/L	97	45-129	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (a) Anthracene	2.000	2.008		ug/L	100	33-143	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Chrysene	2.000	1.995		ug/L	100	17-168	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (k) Fluoranthene	2.000	1.992		ug/L	100	24-159	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (b) Fluoranthene	2.000	2.051		ug/L	103	24-159	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (a) Pyrene	2.000	2.106		ug/L	105	17-163	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Indeno (1,2,3-c,d) Pyrene	2.000	2.028		ug/L	101	25-175	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Dibenz (a,h) Anthracene	2.000	2.054		ug/L	103	25-175	10	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (g,h,i) Perylene	2.000	2.253		ug/L	113	25-157	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41

Total number of LCS compounds: 18
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Qual - Qualifiers RPD: Relative Percent Difference



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The difference is service

Work Order: 18-07-1594

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Sample Analysis Summary Report

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 300.0	N/A	27	IC 10	1
EPA 6010B	EPA 3010A Total	1080	ICP 8300	1
EPA 7470A	EPA 7470A Total	868	Mercury 07	1
EPA 8260B	EPA 5030C	1162	GC/MS UU	2
EPA 8270C SIM PAHs	EPA 3510C	928	GC/MS EEE	1
SM 2320B	N/A	834	PCT 1	1
SM 2540 C	N/A	1136	N/A	1
SM 4500-CI C	N/A	1086	BUR02	1


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Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841



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Work Order: 18-07-1594

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Glossary of Terms and Qualifiers

Qualifiers	Definition
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stdns.
HO	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS was in control.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
SG	A silica gel cleanup procedure was performed.
SN	See applicable analysis comment.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN OF CUSTODY RECORD

DATE: 0+20/18

PAGE: 1 OF 2

Site Name	
Provide MRN for retail or AFE for major projects	
Retail Project (MRN)	
Major Project (AFE)	
Project Name	ExxonMobil Gladiola Station

GLOBAL ID #	COELT LOG CODE:
	PROJECT CONTACT:
	David Purdy
	SAMPLER(S):
	Stephen Hunter, Vincent Nguyen
rdno.com	

REQUESTED ANALYSIS

[illegible]

Relinquished by (Signature)	<i>Stephan Porter</i>	Received by (Signature)	<i>Fed Ex</i>
Relinquished by (Signature)		Received by (Signature)	<i>[Signature]</i>
Relinquished by (Signature)		Received by (Signature)	<i>[Signature]</i>

1594

Recipient's Name Please print.

ORIGIN ID: H0BA (949) 457-8950

SHIP DATE: 20 JUL 18
ACTWGT: 52.20 LB
CAD: 006994240
DIMS: 15-3-3

Part # 1594
B 7969
12:00 07:21

CARDINO
20505 CRESCENT BAY DR
LAKE FOREST, CA 92630
UNITED STATES US

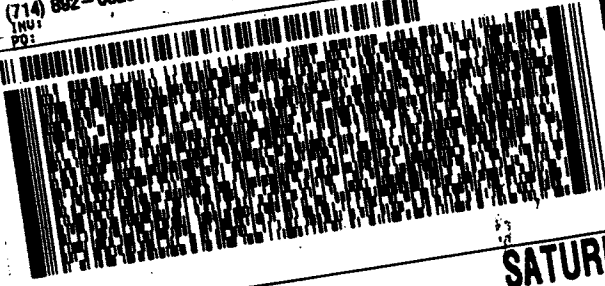
RT 138
ST 26

EUROFINS CALSCIENCE
7440 LINCOLN WAY
GARDEN GROVE CA 92841

(714) 892-5626

REF: DEPT:

INU: PO:



FedEx
Express


3 of 5

MPS# 7727 7903 7969
0263

Mstr# 7727 7903 7947

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO APVA

92841
CA-US SNA



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Calscience

WORK ORDER NUMBER: 18-07-1594

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Cardno

DATE: 07/21/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: -0.5°C); Temperature (w/o CF): 2.8°C (w/ CF): 2.3°C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ Filter

Checked by: 802

CUSTODY SEAL:

Cooler ☒ Present and Intact☐ Present but Not Intact☐ Not Present☐ N/A

Checked by: 802

Sample(s) ☐ Present and Intact☐ Present but Not Intact☒ Not Present☐ N/A

Checked by: 728

SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples ☒ Yes ☐ No ☐ N/ACOC document(s) received complete ☒ Yes ☐ No ☐ N/A☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ Yes ☐ No ☐ N/ASample container label(s) consistent with COC ☒ Yes ☐ No ☐ N/ASample container(s) intact and in good condition ☒ Yes ☐ No ☐ N/AProper containers for analyses requested ☒ Yes ☐ No ☐ N/ASufficient volume/mass for analyses requested ☒ Yes ☐ No ☐ N/ASamples received within holding time ☒ Yes ☐ No ☐ N/A

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ Yes ☐ No ☒ N/AProper preservation chemical(s) noted on COC and/or sample container ☒ Yes ☐ No ☐ N/A

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☒ Yes ☐ No ☐ N/AContainer(s) for certain analysis free of headspace ☒ Yes ☐ No ☐ N/A☒ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ Yes ☐ No ☒ N/A

CONTAINER TYPE:

(Trip Blank Lot Number: 180709B)

Aqueous: ☐ VOA ☒ VOAh ☐ VOAna₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☒ 125PB ☐ 125PBznna (pH__9)☐ 250AGB ☐ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☒ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 771s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄·H₂O, znna = Zn (CH₃CO₂)₂ + NaOH

Reviewed by: 1017



Calscience



WORK ORDER NUMBER: 18-07-1591

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno

Client Project Name: ExxonMobil Gladiola Station

Attention: David Purdy
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

David L. Purdy

Approved for release on 08/06/2018 by:
Cecile deGuia
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



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Work Order Number: 18-07-1591

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Work Order Narrative

Work Order: 18-07-1591

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/21/18. They were assigned to Work Order 18-07-1591.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.


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Sample Summary

Client:	Cardno	Work Order:	18-07-1591
	20505 Crescent Bay Drive	Project Name:	ExxonMobil Gladiola Station
	Lake Forest, CA 92630-8825	PO Number:	
		Date/Time Received:	07/21/18 11:30
		Number of Containers:	36
Attn:	David Purdy		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-39-B4/MW30	18-07-1591-1	07/19/18 09:00	12	Aqueous
W-40-B2/MW28	18-07-1591-2	07/19/18 11:50	11	Aqueous
W-42-B6/MW32	18-07-1591-3	07/19/18 14:30	11	Aqueous
W-41-B5/MW31	18-07-1591-4	07/19/18 17:20	0	Aqueous
TRIP BLANK	18-07-1591-5	07/19/18 00:00	2	Aqueous

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Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: N/A
Method: EPA 300.0
Units: mg/L

Project: ExxonMobil Gladiola Station

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-39-B4/MW30	18-07-1591-1-F	07/19/18 09:00	Aqueous	IC 7	N/A	07/25/18 00:52	180724L02

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Sulfate	100	2.0	0.98	2.00	

W-40-B2/MW28	18-07-1591-2-F	07/19/18 11:50	Aqueous	IC 7	N/A	07/25/18 01:10	180724L02
--------------	----------------	----------------	---------	------	-----	----------------	-----------

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Sulfate	430	10	4.9	10.0	

W-42-B6/MW32	18-07-1591-3-F	07/19/18 14:30	Aqueous	IC 7	N/A	07/23/18 22:08	180723L01
--------------	----------------	----------------	---------	------	-----	----------------	-----------

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Sulfate	53	1.0	0.49	1.00	

Method Blank	099-12-906-8656	N/A	Aqueous	IC 7	N/A	07/23/18 10:22	180723L01
--------------	-----------------	-----	---------	------	-----	----------------	-----------

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Sulfate	ND	1.0	0.49	1.00	

Method Blank	099-12-906-8657	N/A	Aqueous	IC 7	N/A	07/24/18 20:16	180724L02
--------------	-----------------	-----	---------	------	-----	----------------	-----------

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Sulfate	ND	1.0	0.49	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: N/A
Method: SM 2320B
Units: mg/L

Project: ExxonMobil Gladiola Station

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-39-B4/MW30	18-07-1591-1-G	07/19/18 09:00	Aqueous	PCT 1	N/A	07/24/18 02:19	I0723ALKB2

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Alkalinity, Total (as CaCO3)	170	5.0	1.7	1.00	

W-40-B2/MW28	18-07-1591-2-H	07/19/18 11:50	Aqueous	PCT 1	N/A	07/24/18 02:19	I0723ALKB2
--------------	----------------	----------------	---------	-------	-----	----------------	------------

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Alkalinity, Total (as CaCO3)	140	5.0	1.7	1.00	

W-42-B6/MW32	18-07-1591-3-G	07/19/18 14:30	Aqueous	PCT 1	N/A	07/24/18 02:19	I0723ALKB2
--------------	----------------	----------------	---------	-------	-----	----------------	------------

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Alkalinity, Total (as CaCO3)	450	5.0	1.7	1.00	

Method Blank	099-17-086-8	N/A	Aqueous	PCT 1	N/A	07/24/18 02:19	I0723ALKB2
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Alkalinity, Total (as CaCO3)	ND	5.0	1.7	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: N/A
Method: SM 2540 C
Units: mg/L

Project: ExxonMobil Gladiola Station

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-39-B4/MW30	18-07-1591-1-L	07/19/18 09:00	Aqueous	N/A	07/25/18	07/25/18 16:00	I0725TDSL1

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Dissolved	725	1.00	0.870	1.00	

W-40-B2/MW28	18-07-1591-2-K	07/19/18 11:50	Aqueous	N/A	07/25/18	07/25/18 16:00	I0725TDSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Dissolved	1060	10.0	0.870	1.00	

W-42-B6/MW32	18-07-1591-3-K	07/19/18 14:30	Aqueous	N/A	07/25/18	07/25/18 16:00	I0725TDSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Dissolved	705	1.00	0.870	1.00	

Method Blank	099-12-180-6312	N/A	Aqueous	N/A	07/25/18	07/25/18 16:00	I0725TDSL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Solids, Total Dissolved	ND	1.0	0.87	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: N/A
Method: SM 4500-Cl C
Units: mg/L

Project: ExxonMobil Gladiola Station

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-39-B4/MW30	18-07-1591-1-G	07/19/18 09:00	Aqueous	BUR02	N/A	07/24/18 18:00	I0724CLCL1

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chloride	170	2.0	0.76	1.00	

W-40-B2/MW28	18-07-1591-2-G	07/19/18 11:50	Aqueous	BUR02	N/A	07/24/18 18:00	I0724CLCL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chloride	220	2.0	0.76	1.00	

W-42-B6/MW32	18-07-1591-3-G	07/19/18 14:30	Aqueous	BUR02	N/A	07/24/18 18:00	I0724CLCL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chloride	47	2.0	0.76	1.00	

Method Blank	099-05-057-2222	N/A	Aqueous	BUR02	N/A	07/24/18 18:00	I0724CLCL1
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Chloride	ND	2.0	0.76	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 3010A Total
Method: EPA 6010B
Units: mg/L

Project: ExxonMobil Gladiola Station

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-39-B4/MW30	18-07-1591-1-H	07/19/18 09:00	Aqueous	ICP 8300	07/30/18	08/03/18 15:35	180730LA5

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.00958	0.0100	0.00438	1.00	J
Barium	0.0590	0.0100	0.00296	1.00	
Cadmium	ND	0.0100	0.00269	1.00	
Chromium	ND	0.0100	0.00271	1.00	
Lead	ND	0.0100	0.00406	1.00	
Selenium	ND	0.0150	0.00699	1.00	
Silver	ND	0.00500	0.00139	1.00	

W-40-B2/MW28	18-07-1591-2-H	07/19/18 11:50	Aqueous	ICP 8300	07/30/18	08/03/18 15:40	180730LA5
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	0.0156	0.0100	0.00438	1.00	
Barium	0.0874	0.0100	0.00296	1.00	
Cadmium	ND	0.0100	0.00269	1.00	
Chromium	ND	0.0100	0.00271	1.00	
Lead	ND	0.0100	0.00406	1.00	
Selenium	0.0300	0.0150	0.00699	1.00	
Silver	0.00196	0.00500	0.00139	1.00	J

W-42-B6/MW32	18-07-1591-3-H	07/19/18 14:30	Aqueous	ICP 8300	07/30/18	08/03/18 15:41	180730LA5
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Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Arsenic	ND	0.0100	0.00438	1.00	
Barium	0.0799	0.0100	0.00296	1.00	
Cadmium	ND	0.0100	0.00269	1.00	
Chromium	ND	0.0100	0.00271	1.00	
Lead	ND	0.0100	0.00406	1.00	
Selenium	0.0187	0.0150	0.00699	1.00	
Silver	ND	0.00500	0.00139	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno	Date Received: 07/21/18
20505 Crescent Bay Drive	Work Order: 18-07-1591
Lake Forest, CA 92630-8825	Preparation: EPA 3010A Total
	Method: EPA 6010B
	Units: mg/L
Project: ExxonMobil Gladiola Station	Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-003-16987	N/A	Aqueous	ICP 8300	07/30/18	08/03/18 14:53	180730LA5

Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>MDL</u>	<u>DF</u>	<u>Qualifiers</u>
Arsenic	ND	0.0100	0.00438	1.00	
Barium	ND	0.0100	0.00296	1.00	
Cadmium	ND	0.0100	0.00269	1.00	
Chromium	ND	0.0100	0.00271	1.00	
Lead	ND	0.0100	0.00406	1.00	
Selenium	ND	0.0150	0.00699	1.00	
Silver	ND	0.00500	0.00139	1.00	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 7470A Total
Method: EPA 7470A
Units: mg/L

Project: ExxonMobil Gladiola Station

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-39-B4/MW30	18-07-1591-1-H	07/19/18 09:00	Aqueous	Mercury 07	08/02/18	08/02/18 15:00	180802LA1M

Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000102	0.000200	0.0000453	1.00	B,J

W-40-B2/MW28	18-07-1591-2-H	07/19/18 11:50	Aqueous	Mercury 07	08/02/18	08/02/18 15:02	180802LA1M
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Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000104	0.000200	0.0000453	1.00	B,J

W-42-B6/MW32	18-07-1591-3-H	07/19/18 14:30	Aqueous	Mercury 07	08/02/18	08/02/18 15:04	180802LA1M
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Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.000153	0.000200	0.0000453	1.00	B,J

Method Blank	099-12-457-382	N/A	Aqueous	Mercury 07	08/02/18	08/02/18 14:34	180802LA1M
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Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Mercury	0.0000644	0.000200	0.0000453	1.00	J

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 3510C
Method: EPA 8270C SIM PAHs
Units: mg/L

Project: ExxonMobil Gladiola Station

Page 1 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-39-B4/MW30	18-07-1591-1-I	07/19/18 09:00	Aqueous	GC/MS EEE	07/25/18	07/26/18 18:45	180725L01

Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Naphthalene	ND	0.00020	0.000075	1.00	
2-Methylnaphthalene	ND	0.00020	0.000076	1.00	
1-Methylnaphthalene	ND	0.00020	0.000076	1.00	
Acenaphthylene	ND	0.00020	0.000076	1.00	
Acenaphthene	ND	0.00020	0.000062	1.00	
Fluorene	ND	0.00020	0.000074	1.00	
Phenanthrene	ND	0.00020	0.000069	1.00	
Anthracene	ND	0.00020	0.000069	1.00	
Fluoranthene	ND	0.00020	0.000076	1.00	
Pyrene	ND	0.00020	0.000073	1.00	
Benzo (a) Anthracene	ND	0.00020	0.000079	1.00	
Chrysene	ND	0.00020	0.000067	1.00	
Benzo (k) Fluoranthene	ND	0.00020	0.000082	1.00	
Benzo (b) Fluoranthene	ND	0.00020	0.000087	1.00	
Benzo (a) Pyrene	ND	0.00020	0.00010	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.00020	0.000084	1.00	
Dibenz (a,h) Anthracene	ND	0.00020	0.000079	1.00	
Benzo (g,h,i) Perylene	ND	0.00020	0.000097	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	80	28-139	
2-Fluorobiphenyl	92	33-144	
p-Terphenyl-d14	94	23-160	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 3510C
Method: EPA 8270C SIM PAHs
Units: mg/L

Project: ExxonMobil Gladiola Station

Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-40-B2/MW28	18-07-1591-2-I	07/19/18 11:50	Aqueous	GC/MS EEE	07/25/18	07/26/18 19:05	180725L01

Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Naphthalene	ND	0.00020	0.000075	1.00	
2-Methylnaphthalene	ND	0.00020	0.000076	1.00	
1-Methylnaphthalene	ND	0.00020	0.000076	1.00	
Acenaphthylene	ND	0.00020	0.000076	1.00	
Acenaphthene	ND	0.00020	0.000062	1.00	
Fluorene	ND	0.00020	0.000074	1.00	
Phenanthrene	ND	0.00020	0.000069	1.00	
Anthracene	ND	0.00020	0.000069	1.00	
Fluoranthene	ND	0.00020	0.000076	1.00	
Pyrene	ND	0.00020	0.000073	1.00	
Benzo (a) Anthracene	ND	0.00020	0.000079	1.00	
Chrysene	ND	0.00020	0.000067	1.00	
Benzo (k) Fluoranthene	ND	0.00020	0.000082	1.00	
Benzo (b) Fluoranthene	ND	0.00020	0.000087	1.00	
Benzo (a) Pyrene	ND	0.00020	0.00010	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.00020	0.000084	1.00	
Dibenz (a,h) Anthracene	ND	0.00020	0.000079	1.00	
Benzo (g,h,i) Perylene	ND	0.00020	0.000097	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	85	28-139	
2-Fluorobiphenyl	89	33-144	
p-Terphenyl-d14	86	23-160	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 3510C
Method: EPA 8270C SIM PAHs
Units: mg/L

Project: ExxonMobil Gladiola Station

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-42-B6/MW32	18-07-1591-3-I	07/19/18 14:30	Aqueous	GC/MS EEE	07/25/18	07/26/18 19:26	180725L01

Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Naphthalene	ND	0.00020	0.000075	1.00	
2-Methylnaphthalene	ND	0.00020	0.000076	1.00	
1-Methylnaphthalene	ND	0.00020	0.000076	1.00	
Acenaphthylene	ND	0.00020	0.000076	1.00	
Acenaphthene	ND	0.00020	0.000062	1.00	
Fluorene	ND	0.00020	0.000074	1.00	
Phenanthrene	ND	0.00020	0.000069	1.00	
Anthracene	ND	0.00020	0.000069	1.00	
Fluoranthene	ND	0.00020	0.000076	1.00	
Pyrene	ND	0.00020	0.000073	1.00	
Benzo (a) Anthracene	ND	0.00020	0.000079	1.00	
Chrysene	ND	0.00020	0.000067	1.00	
Benzo (k) Fluoranthene	ND	0.00020	0.000082	1.00	
Benzo (b) Fluoranthene	ND	0.00020	0.000087	1.00	
Benzo (a) Pyrene	ND	0.00020	0.00010	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.00020	0.000084	1.00	
Dibenz (a,h) Anthracene	ND	0.00020	0.000079	1.00	
Benzo (g,h,i) Perylene	ND	0.00020	0.000097	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	84	28-139	
2-Fluorobiphenyl	100	33-144	
p-Terphenyl-d14	89	23-160	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 3510C
Method: EPA 8270C SIM PAHS
Units: mg/L

Project: ExxonMobil Gladiola Station

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-06-008-1064	N/A	Aqueous	GC/MS EEE	07/25/18	07/26/18 15:00	180725L01

Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Naphthalene	ND	0.00020	0.000075	1.00	
2-Methylnaphthalene	ND	0.00020	0.000076	1.00	
1-Methylnaphthalene	ND	0.00020	0.000076	1.00	
Acenaphthylene	ND	0.00020	0.000076	1.00	
Acenaphthene	ND	0.00020	0.000062	1.00	
Fluorene	ND	0.00020	0.000074	1.00	
Phenanthrene	ND	0.00020	0.000069	1.00	
Anthracene	ND	0.00020	0.000069	1.00	
Fluoranthene	ND	0.00020	0.000076	1.00	
Pyrene	ND	0.00020	0.000073	1.00	
Benzo (a) Anthracene	ND	0.00020	0.000079	1.00	
Chrysene	ND	0.00020	0.000067	1.00	
Benzo (k) Fluoranthene	ND	0.00020	0.000082	1.00	
Benzo (b) Fluoranthene	ND	0.00020	0.000087	1.00	
Benzo (a) Pyrene	ND	0.00020	0.00010	1.00	
Indeno (1,2,3-c,d) Pyrene	ND	0.00020	0.000084	1.00	
Dibenz (a,h) Anthracene	ND	0.00020	0.000079	1.00	
Benzo (g,h,i) Perylene	ND	0.00020	0.000097	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
Nitrobenzene-d5	85	28-139	
2-Fluorobiphenyl	84	33-144	
p-Terphenyl-d14	93	23-160	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/L

Project: ExxonMobil Gladiola Station

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-39-B4/MW30	18-07-1591-1-B	07/19/18 09:00	Aqueous	GC/MS UU	07/30/18	07/31/18 04:08	180730L031

Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzene	ND	0.00050	0.00020	1.00	
Toluene	0.00025	0.00050	0.00020	1.00	J
Ethylbenzene	ND	0.00050	0.00020	1.00	
o-Xylene	ND	0.00050	0.00032	1.00	
p/m-Xylene	ND	0.00050	0.00020	1.00	
Xylenes (total)	ND	0.00050	0.00020	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0010	0.00020	1.00	
1,1,1,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,1-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.00050	0.00024	1.00	
1,1-Dichloroethane	ND	0.00050	0.00020	1.00	
1,1-Dichloroethene	ND	0.00050	0.00028	1.00	
1,1-Dichloropropene	ND	0.00050	0.00030	1.00	
1,2,3-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,3-Trichloropropane	ND	0.0010	0.00040	1.00	
1,2,4-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,4-Trimethylbenzene	ND	0.00050	0.00020	1.00	
1,3,5-Trimethylbenzene	ND	0.00050	0.00020	1.00	
c-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
1,2-Dibromo-3-Chloropropane	ND	0.0050	0.0020	1.00	
1,2-Dibromoethane	ND	0.00050	0.00020	1.00	
1,2-Dichlorobenzene	ND	0.00050	0.00020	1.00	
1,2-Dichloroethane	ND	0.00050	0.00020	1.00	
1,2-Dichloropropane	ND	0.00050	0.00020	1.00	
t-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
c-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,3-Dichlorobenzene	ND	0.00050	0.00028	1.00	
1,3-Dichloropropane	ND	0.0010	0.00040	1.00	
t-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,4-Dichlorobenzene	ND	0.00050	0.00020	1.00	
2,2-Dichloropropane	ND	0.0010	0.00040	1.00	
2-Chlorotoluene	ND	0.00050	0.00020	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/L

Project: ExxonMobil Gladiola Station

Page 2 of 10

Parameter	Result	RL	MDL	DF	Qualifiers
4-Chlorotoluene	ND	0.00050	0.00036	1.00	
4-Methyl-2-Pentanone	ND	0.0050	0.0020	1.00	
Acetone	ND	0.010	0.0040	1.00	
Bromobenzene	ND	0.00050	0.00032	1.00	
Bromochloromethane	ND	0.0010	0.00040	1.00	
Bromoform	ND	0.00050	0.00025	1.00	
Bromomethane	ND	0.0010	0.00040	1.00	
Carbon Disulfide	ND	0.0010	0.00040	1.00	
Carbon Tetrachloride	ND	0.00050	0.00020	1.00	
Chlorobenzene	ND	0.00050	0.00020	1.00	
Dibromochloromethane	ND	0.00050	0.00020	1.00	
Chloroethane	ND	0.00050	0.00032	1.00	
Chloroform	ND	0.00050	0.00020	1.00	
Chloromethane	ND	0.00050	0.00029	1.00	
Dibromomethane	ND	0.00050	0.00020	1.00	
Bromodichloromethane	ND	0.00050	0.00020	1.00	
Dichlorodifluoromethane	ND	0.0010	0.00040	1.00	
Hexachloro-1,3-Butadiene	ND	0.0020	0.00080	1.00	
Isopropylbenzene	ND	0.00050	0.00020	1.00	
2-Butanone	ND	0.0050	0.0020	1.00	
Methylene Chloride	ND	0.0010	0.00080	1.00	
2-Hexanone	ND	0.010	0.0040	1.00	
Naphthalene	ND	0.010	0.00040	1.00	
n-Butylbenzene	ND	0.00050	0.00020	1.00	
n-Propylbenzene	ND	0.00050	0.00020	1.00	
p-Isopropyltoluene	ND	0.00050	0.00020	1.00	
sec-Butylbenzene	ND	0.00050	0.00020	1.00	
Styrene	ND	0.00050	0.00020	1.00	
tert-Butylbenzene	ND	0.00050	0.00020	1.00	
Tetrachloroethene	ND	0.00050	0.00020	1.00	
Trichloroethene	ND	0.00050	0.00029	1.00	
Trichlorofluoromethane	ND	0.00050	0.00020	1.00	
Vinyl Chloride	ND	0.00050	0.00020	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
1,4-Bromofluorobenzene	97	68-120			
Dibromofluoromethane	103	80-127			
1,2-Dichloroethane-d4	99	80-128			
Toluene-d8	101	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/L

Project: ExxonMobil Gladiola Station

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-40-B2/MW28	18-07-1591-2-B	07/19/18 11:50	Aqueous	GC/MS UU	07/30/18	07/31/18 04:35	180730L031

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzene	ND	0.00050	0.00020	1.00	
Toluene	0.00025	0.00050	0.00020	1.00	J
Ethylbenzene	ND	0.00050	0.00020	1.00	
o-Xylene	ND	0.00050	0.00032	1.00	
p/m-Xylene	ND	0.00050	0.00020	1.00	
Xylenes (total)	ND	0.00050	0.00020	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0010	0.00020	1.00	
1,1,1,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,1-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.00050	0.00024	1.00	
1,1-Dichloroethane	ND	0.00050	0.00020	1.00	
1,1-Dichloroethene	ND	0.00050	0.00028	1.00	
1,1-Dichloropropene	ND	0.00050	0.00030	1.00	
1,2,3-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,3-Trichloropropane	ND	0.0010	0.00040	1.00	
1,2,4-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,4-Trimethylbenzene	ND	0.00050	0.00020	1.00	
1,3,5-Trimethylbenzene	ND	0.00050	0.00020	1.00	
c-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
1,2-Dibromo-3-Chloropropane	ND	0.0050	0.0020	1.00	
1,2-Dibromoethane	ND	0.00050	0.00020	1.00	
1,2-Dichlorobenzene	ND	0.00050	0.00020	1.00	
1,2-Dichloroethane	ND	0.00050	0.00020	1.00	
1,2-Dichloropropane	ND	0.00050	0.00020	1.00	
t-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
c-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,3-Dichlorobenzene	ND	0.00050	0.00028	1.00	
1,3-Dichloropropane	ND	0.0010	0.00040	1.00	
t-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,4-Dichlorobenzene	ND	0.00050	0.00020	1.00	
2,2-Dichloropropane	ND	0.0010	0.00040	1.00	
2-Chlorotoluene	ND	0.00050	0.00020	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/L

Project: ExxonMobil Gladiola Station

Page 4 of 10

Parameter	Result	RL	MDL	DF	Qualifiers
4-Chlorotoluene	ND	0.00050	0.00036	1.00	
4-Methyl-2-Pentanone	ND	0.0050	0.0020	1.00	
Acetone	ND	0.010	0.0040	1.00	
Bromobenzene	ND	0.00050	0.00032	1.00	
Bromochloromethane	ND	0.0010	0.00040	1.00	
Bromoform	ND	0.00050	0.00025	1.00	
Bromomethane	ND	0.0010	0.00040	1.00	
Carbon Disulfide	ND	0.0010	0.00040	1.00	
Carbon Tetrachloride	ND	0.00050	0.00020	1.00	
Chlorobenzene	ND	0.00050	0.00020	1.00	
Dibromochloromethane	ND	0.00050	0.00020	1.00	
Chloroethane	ND	0.00050	0.00032	1.00	
Chloroform	ND	0.00050	0.00020	1.00	
Chloromethane	ND	0.00050	0.00029	1.00	
Dibromomethane	ND	0.00050	0.00020	1.00	
Bromodichloromethane	ND	0.00050	0.00020	1.00	
Dichlorodifluoromethane	ND	0.0010	0.00040	1.00	
Hexachloro-1,3-Butadiene	ND	0.0020	0.00080	1.00	
Isopropylbenzene	ND	0.00050	0.00020	1.00	
2-Butanone	ND	0.0050	0.0020	1.00	
Methylene Chloride	ND	0.0010	0.00080	1.00	
2-Hexanone	ND	0.010	0.0040	1.00	
Naphthalene	ND	0.010	0.00040	1.00	
n-Butylbenzene	ND	0.00050	0.00020	1.00	
n-Propylbenzene	ND	0.00050	0.00020	1.00	
p-Isopropyltoluene	ND	0.00050	0.00020	1.00	
sec-Butylbenzene	ND	0.00050	0.00020	1.00	
Styrene	ND	0.00050	0.00020	1.00	
tert-Butylbenzene	ND	0.00050	0.00020	1.00	
Tetrachloroethene	ND	0.00050	0.00020	1.00	
Trichloroethene	ND	0.00050	0.00029	1.00	
Trichlorofluoromethane	ND	0.00050	0.00020	1.00	
Vinyl Chloride	ND	0.00050	0.00020	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
1,4-Bromofluorobenzene	95	68-120			
Dibromofluoromethane	103	80-127			
1,2-Dichloroethane-d4	99	80-128			
Toluene-d8	102	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno 20505 Crescent Bay Drive Lake Forest, CA 92630-8825 Project: ExxonMobil Gladiola Station	Date Received: 07/21/18 Work Order: 18-07-1591 Preparation: EPA 5030C Method: EPA 8260B Units: mg/L
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-42-B6/MW32	18-07-1591-3-C	07/19/18 14:30	Aqueous	GC/MS UU	08/01/18	08/01/18 17:43	180801L042

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzene	0.0041	0.00050	0.00020	1.00	
Toluene	0.00022	0.00050	0.00020	1.00	J
Ethylbenzene	0.00042	0.00050	0.00020	1.00	J
o-Xylene	ND	0.00050	0.00032	1.00	
p/m-Xylene	0.012	0.00050	0.00020	1.00	
Xylenes (total)	0.012	0.00050	0.00020	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0010	0.00020	1.00	
1,1,1,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,1-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.00050	0.00024	1.00	
1,1-Dichloroethane	ND	0.00050	0.00020	1.00	
1,1-Dichloroethene	ND	0.00050	0.00028	1.00	
1,1-Dichloropropene	ND	0.00050	0.00030	1.00	
1,2,3-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,3-Trichloropropane	ND	0.0010	0.00040	1.00	
1,2,4-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,4-Trimethylbenzene	0.012	0.00050	0.00020	1.00	
1,3,5-Trimethylbenzene	0.010	0.00050	0.00020	1.00	
c-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
1,2-Dibromo-3-Chloropropane	ND	0.0050	0.0020	1.00	
1,2-Dibromoethane	ND	0.00050	0.00020	1.00	
1,2-Dichlorobenzene	ND	0.00050	0.00020	1.00	
1,2-Dichloroethane	ND	0.00050	0.00020	1.00	
1,2-Dichloropropane	ND	0.00050	0.00020	1.00	
t-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
c-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,3-Dichlorobenzene	ND	0.00050	0.00028	1.00	
1,3-Dichloropropane	ND	0.0010	0.00040	1.00	
t-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,4-Dichlorobenzene	ND	0.00050	0.00020	1.00	
2,2-Dichloropropane	ND	0.0010	0.00040	1.00	
2-Chlorotoluene	ND	0.00050	0.00020	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/L

Project: ExxonMobil Gladiola Station

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Parameter	Result	RL	MDL	DF	Qualifiers
4-Chlorotoluene	ND	0.00050	0.00036	1.00	
4-Methyl-2-Pentanone	ND	0.0050	0.0020	1.00	
Acetone	0.0050	0.010	0.0040	1.00	J
Bromobenzene	ND	0.00050	0.00032	1.00	
Bromochloromethane	ND	0.0010	0.00040	1.00	
Bromoform	ND	0.00050	0.00025	1.00	
Bromomethane	ND	0.0010	0.00040	1.00	
Carbon Disulfide	ND	0.0010	0.00040	1.00	
Carbon Tetrachloride	ND	0.00050	0.00020	1.00	
Chlorobenzene	ND	0.00050	0.00020	1.00	
Dibromochloromethane	ND	0.00050	0.00020	1.00	
Chloroethane	ND	0.00050	0.00032	1.00	
Chloroform	ND	0.00050	0.00020	1.00	
Chloromethane	ND	0.00050	0.00029	1.00	
Dibromomethane	ND	0.00050	0.00020	1.00	
Bromodichloromethane	ND	0.00050	0.00020	1.00	
Dichlorodifluoromethane	ND	0.0010	0.00040	1.00	
Hexachloro-1,3-Butadiene	ND	0.0020	0.00080	1.00	
Isopropylbenzene	0.0054	0.00050	0.00020	1.00	
2-Butanone	ND	0.0050	0.0020	1.00	
Methylene Chloride	ND	0.0010	0.00080	1.00	
2-Hexanone	ND	0.010	0.0040	1.00	
Naphthalene	ND	0.010	0.00040	1.00	
n-Butylbenzene	ND	0.00050	0.00020	1.00	
n-Propylbenzene	0.00039	0.00050	0.00020	1.00	J
p-Isopropyltoluene	0.0014	0.00050	0.00020	1.00	
sec-Butylbenzene	0.0016	0.00050	0.00020	1.00	
Styrene	ND	0.00050	0.00020	1.00	
tert-Butylbenzene	0.00084	0.00050	0.00020	1.00	
Tetrachloroethene	ND	0.00050	0.00020	1.00	
Trichloroethene	ND	0.00050	0.00029	1.00	
Trichlorofluoromethane	ND	0.00050	0.00020	1.00	
Vinyl Chloride	ND	0.00050	0.00020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	101	80-127	
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno 20505 Crescent Bay Drive Lake Forest, CA 92630-8825 Project: ExxonMobil Gladiola Station	Date Received: 07/21/18 Work Order: 18-07-1591 Preparation: EPA 5030C Method: EPA 8260B Units: mg/L
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-878-751	N/A	Aqueous	GC/MS UU	07/30/18	07/30/18 21:25	180730L031

Comment(s): - Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzene	ND	0.00050	0.00020	1.00	
Toluene	ND	0.00050	0.00020	1.00	
Ethylbenzene	ND	0.00050	0.00020	1.00	
o-Xylene	ND	0.00050	0.00032	1.00	
p/m-Xylene	ND	0.00050	0.00020	1.00	
Xylenes (total)	ND	0.00050	0.00020	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0010	0.00020	1.00	
1,1,1,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,1-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.00050	0.00024	1.00	
1,1-Dichloroethane	ND	0.00050	0.00020	1.00	
1,1-Dichloroethene	ND	0.00050	0.00028	1.00	
1,1-Dichloropropene	ND	0.00050	0.00030	1.00	
1,2,3-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,3-Trichloropropane	ND	0.0010	0.00040	1.00	
1,2,4-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,4-Trimethylbenzene	ND	0.00050	0.00020	1.00	
1,3,5-Trimethylbenzene	ND	0.00050	0.00020	1.00	
c-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
1,2-Dibromo-3-Chloropropane	ND	0.0050	0.0020	1.00	
1,2-Dibromoethane	ND	0.00050	0.00020	1.00	
1,2-Dichlorobenzene	ND	0.00050	0.00020	1.00	
1,2-Dichloroethane	ND	0.00050	0.00020	1.00	
1,2-Dichloropropane	ND	0.00050	0.00020	1.00	
t-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
c-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,3-Dichlorobenzene	ND	0.00050	0.00028	1.00	
1,3-Dichloropropane	ND	0.0010	0.00040	1.00	
t-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,4-Dichlorobenzene	ND	0.00050	0.00020	1.00	
2,2-Dichloropropane	ND	0.0010	0.00040	1.00	
2-Chlorotoluene	ND	0.00050	0.00020	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/L

Project: ExxonMobil Gladiola Station

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Parameter	Result	RL	MDL	DF	Qualifiers
4-Chlorotoluene	ND	0.00050	0.00036	1.00	
4-Methyl-2-Pentanone	ND	0.0050	0.0020	1.00	
Acetone	ND	0.010	0.0040	1.00	
Bromobenzene	ND	0.00050	0.00032	1.00	
Bromochloromethane	ND	0.0010	0.00040	1.00	
Bromoform	ND	0.00050	0.00025	1.00	
Bromomethane	ND	0.0010	0.00040	1.00	
Carbon Disulfide	ND	0.0010	0.00040	1.00	
Carbon Tetrachloride	ND	0.00050	0.00020	1.00	
Chlorobenzene	ND	0.00050	0.00020	1.00	
Dibromochloromethane	ND	0.00050	0.00020	1.00	
Chloroethane	ND	0.00050	0.00032	1.00	
Chloroform	ND	0.00050	0.00020	1.00	
Chloromethane	ND	0.00050	0.00029	1.00	
Dibromomethane	ND	0.00050	0.00020	1.00	
Bromodichloromethane	ND	0.00050	0.00020	1.00	
Dichlorodifluoromethane	ND	0.0010	0.00040	1.00	
Hexachloro-1,3-Butadiene	ND	0.0020	0.00080	1.00	
Isopropylbenzene	ND	0.00050	0.00020	1.00	
2-Butanone	ND	0.0050	0.0020	1.00	
Methylene Chloride	ND	0.0010	0.00080	1.00	
2-Hexanone	ND	0.010	0.0040	1.00	
Naphthalene	ND	0.010	0.00040	1.00	
n-Butylbenzene	ND	0.00050	0.00020	1.00	
n-Propylbenzene	ND	0.00050	0.00020	1.00	
p-Isopropyltoluene	ND	0.00050	0.00020	1.00	
sec-Butylbenzene	ND	0.00050	0.00020	1.00	
Styrene	ND	0.00050	0.00020	1.00	
tert-Butylbenzene	ND	0.00050	0.00020	1.00	
Tetrachloroethene	ND	0.00050	0.00020	1.00	
Trichloroethene	ND	0.00050	0.00029	1.00	
Trichlorofluoromethane	ND	0.00050	0.00020	1.00	
Vinyl Chloride	ND	0.00050	0.00020	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
1,4-Bromofluorobenzene	98	68-120			
Dibromofluoromethane	102	80-127			
1,2-Dichloroethane-d4	99	80-128			
Toluene-d8	101	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Calscience

Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/L

Project: ExxonMobil Gladiola Station

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-878-754	N/A	Aqueous	GC/MS UU	08/01/18	08/01/18 17:12	180801L042

Comment(s): - Results were evaluated to the MDL (DL), concentrations $\geq$ to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
Benzene	ND	0.00050	0.00020	1.00	
Toluene	ND	0.00050	0.00020	1.00	
Ethylbenzene	ND	0.00050	0.00020	1.00	
o-Xylene	ND	0.00050	0.00032	1.00	
p/m-Xylene	ND	0.00050	0.00020	1.00	
Xylenes (total)	ND	0.00050	0.00020	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0010	0.00020	1.00	
1,1,1,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,1-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2,2-Tetrachloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloroethane	ND	0.00050	0.00020	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.00050	0.00024	1.00	
1,1-Dichloroethane	ND	0.00050	0.00020	1.00	
1,1-Dichloroethene	ND	0.00050	0.00028	1.00	
1,1-Dichloropropene	ND	0.00050	0.00030	1.00	
1,2,3-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,3-Trichloropropane	ND	0.0010	0.00040	1.00	
1,2,4-Trichlorobenzene	ND	0.00050	0.00020	1.00	
1,2,4-Trimethylbenzene	ND	0.00050	0.00020	1.00	
1,3,5-Trimethylbenzene	ND	0.00050	0.00020	1.00	
c-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
1,2-Dibromo-3-Chloropropane	ND	0.0050	0.0020	1.00	
1,2-Dibromoethane	ND	0.00050	0.00020	1.00	
1,2-Dichlorobenzene	ND	0.00050	0.00020	1.00	
1,2-Dichloroethane	ND	0.00050	0.00020	1.00	
1,2-Dichloropropane	ND	0.00050	0.00020	1.00	
t-1,2-Dichloroethene	ND	0.00050	0.00020	1.00	
c-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,3-Dichlorobenzene	ND	0.00050	0.00028	1.00	
1,3-Dichloropropane	ND	0.0010	0.00040	1.00	
t-1,3-Dichloropropene	ND	0.00050	0.00020	1.00	
1,4-Dichlorobenzene	ND	0.00050	0.00020	1.00	
2,2-Dichloropropane	ND	0.0010	0.00040	1.00	
2-Chlorotoluene	ND	0.00050	0.00020	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



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Analytical Report

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/L

Project: ExxonMobil Gladiola Station

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Parameter	Result	RL	MDL	DF	Qualifiers
4-Chlorotoluene	ND	0.00050	0.00036	1.00	
4-Methyl-2-Pentanone	ND	0.0050	0.0020	1.00	
Acetone	ND	0.010	0.0040	1.00	
Bromobenzene	ND	0.00050	0.00032	1.00	
Bromochloromethane	ND	0.0010	0.00040	1.00	
Bromoform	ND	0.00050	0.00025	1.00	
Bromomethane	ND	0.0010	0.00040	1.00	
Carbon Disulfide	ND	0.0010	0.00040	1.00	
Carbon Tetrachloride	ND	0.00050	0.00020	1.00	
Chlorobenzene	ND	0.00050	0.00020	1.00	
Dibromochloromethane	ND	0.00050	0.00020	1.00	
Chloroethane	ND	0.00050	0.00032	1.00	
Chloroform	ND	0.00050	0.00020	1.00	
Chloromethane	ND	0.00050	0.00029	1.00	
Dibromomethane	ND	0.00050	0.00020	1.00	
Bromodichloromethane	ND	0.00050	0.00020	1.00	
Dichlorodifluoromethane	ND	0.0010	0.00040	1.00	
Hexachloro-1,3-Butadiene	ND	0.0020	0.00080	1.00	
Isopropylbenzene	ND	0.00050	0.00020	1.00	
2-Butanone	ND	0.0050	0.0020	1.00	
Methylene Chloride	ND	0.0010	0.00080	1.00	
2-Hexanone	ND	0.010	0.0040	1.00	
Naphthalene	ND	0.010	0.00040	1.00	
n-Butylbenzene	ND	0.00050	0.00020	1.00	
n-Propylbenzene	ND	0.00050	0.00020	1.00	
p-Isopropyltoluene	ND	0.00050	0.00020	1.00	
sec-Butylbenzene	ND	0.00050	0.00020	1.00	
Styrene	ND	0.00050	0.00020	1.00	
tert-Butylbenzene	ND	0.00050	0.00020	1.00	
Tetrachloroethene	ND	0.00050	0.00020	1.00	
Trichloroethene	ND	0.00050	0.00029	1.00	
Trichlorofluoromethane	ND	0.00050	0.00020	1.00	
Vinyl Chloride	ND	0.00050	0.00020	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers		
1,4-Bromofluorobenzene	96	68-120			
Dibromofluoromethane	96	80-127			
1,2-Dichloroethane-d4	97	80-128			
Toluene-d8	101	80-120			

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Quality Control - Spike/Spike Duplicate

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: N/A
Method: EPA 300.0

Project: ExxonMobil Gladiola Station

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-07-1456-3	Sample	Aqueous	IC 7	N/A	07/23/18 18:09	180723S01
18-07-1456-3	Matrix Spike	Aqueous	IC 7	N/A	07/23/18 19:04	180723S01
18-07-1456-3	Matrix Spike Duplicate	Aqueous	IC 7	N/A	07/23/18 19:23	180723S01

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Sulfate	225.0	50.00	294.3	139	286.3	123	80-120	3	0-20	HX

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Spike/Spike Duplicate

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: N/A
Method: SM 4500-Cl C

Project: ExxonMobil Gladiola Station

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-42-B6/MW32	Sample	Aqueous	BUR02	N/A	07/24/18 18:00	I0724CLCS1
W-42-B6/MW32	Matrix Spike	Aqueous	BUR02	N/A	07/24/18 18:00	I0724CLCS1
W-42-B6/MW32	Matrix Spike Duplicate	Aqueous	BUR02	N/A	07/24/18 18:00	I0724CLCS1

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chloride	46.59	100.0	150.6	104	150.1	103	80-120	0	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 3010A Total
Method: EPA 6010B

Project: ExxonMobil Gladiola Station

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-39-B4/MW30	Sample	Aqueous	ICP 8300	07/30/18	08/03/18 15:35	180730SA5
W-39-B4/MW30	Matrix Spike	Aqueous	ICP 8300	07/30/18	08/03/18 15:36	180730SA5
W-39-B4/MW30	Matrix Spike Duplicate	Aqueous	ICP 8300	07/30/18	08/03/18 15:37	180730SA5

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	0.5000	0.5183	104	0.5016	100	80-140	3	0-11	
Barium	0.05900	0.5000	0.5690	102	0.5666	102	87-123	0	0-6	
Cadmium	ND	0.5000	0.4992	100	0.4994	100	82-124	0	0-7	
Chromium	ND	0.5000	0.5051	101	0.5010	100	86-122	1	0-8	
Lead	ND	0.5000	0.5154	103	0.5147	103	84-120	0	0-7	
Selenium	ND	0.5000	0.5244	105	0.5160	103	79-127	2	0-9	
Silver	ND	0.2500	0.02846	11	0.06513	26	86-128	78	0-7	HX,BA

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Spike/Spike Duplicate

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Project: ExxonMobil Gladiola Station

Date Received:
Work Order:
Preparation:
Method:

07/21/18
18-07-1591
EPA 7470A Total
EPA 7470A

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-07-1594-1	Sample	Aqueous	Mercury 07	08/02/18	08/02/18 14:39	180802SA1
18-07-1594-1	Matrix Spike	Aqueous	Mercury 07	08/02/18	08/02/18 14:41	180802SA1
18-07-1594-1	Matrix Spike Duplicate	Aqueous	Mercury 07	08/02/18	08/02/18 14:48	180802SA1

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Mercury	ND	0.01000	0.008332	83	0.007775	78	55-133	7	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Released to Imaging: 12/16/2024 10:33:53 AM



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Quality Control - Spike/Spike Duplicate

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil Gladiola Station

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-07-1590-2	Sample	Aqueous	GC/MS UU	07/30/18	07/30/18 22:23	180730S009
18-07-1590-2	Matrix Spike	Aqueous	GC/MS UU	07/30/18	07/30/18 22:49	180730S009
18-07-1590-2	Matrix Spike Duplicate	Aqueous	GC/MS UU	07/30/18	07/30/18 23:16	180730S009

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	0.01000	0.01224	122	0.01248	125	75-125	2	0-20	
Toluene	0.0007165	0.01000	0.01264	119	0.01310	124	75-125	4	0-20	
Ethylbenzene	ND	0.01000	0.01100	110	0.01153	115	75-125	5	0-20	
o-Xylene	ND	0.01000	0.01052	105	0.01103	110	75-127	5	0-20	
p/m-Xylene	ND	0.02000	0.02122	106	0.02193	110	75-125	3	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	0.01000	0.009436	94	0.01008	101	71-131	7	0-20	
1,1-Dichloroethene	ND	0.01000	0.01263	126	0.01280	128	66-126	1	0-20	HX
1,2-Dibromoethane	ND	0.01000	0.009876	99	0.01043	104	75-126	5	0-20	
1,2-Dichlorobenzene	ND	0.01000	0.009692	97	0.01015	102	75-125	5	0-20	
1,2-Dichloroethane	ND	0.01000	0.01130	113	0.01167	117	75-127	3	0-20	
Carbon Tetrachloride	ND	0.01000	0.01205	121	0.01241	124	69-135	3	0-20	
Chlorobenzene	ND	0.01000	0.01015	102	0.01065	106	75-125	5	0-20	
Trichloroethene	ND	0.01000	0.01176	118	0.01225	122	75-125	4	0-20	
Vinyl Chloride	ND	0.01000	0.01406	141	0.01363	136	52-142	3	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil Gladiola Station

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
18-07-1912-4	Sample	Aqueous	GC/MS UU	08/01/18	08/01/18 21:06	180801S009
18-07-1912-4	Matrix Spike	Aqueous	GC/MS UU	08/01/18	08/01/18 21:36	180801S009
18-07-1912-4	Matrix Spike Duplicate	Aqueous	GC/MS UU	08/01/18	08/01/18 22:07	180801S009

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	0.01000	0.01079	108	0.01016	102	75-125	6	0-20	
Toluene	ND	0.01000	0.01090	109	0.01049	105	75-125	4	0-20	
Ethylbenzene	ND	0.01000	0.01137	114	0.01072	107	75-125	6	0-20	
o-Xylene	ND	0.01000	0.01112	111	0.01060	106	75-127	5	0-20	
p/m-Xylene	ND	0.02000	0.02181	109	0.02051	103	75-125	6	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	0.01000	0.009409	94	0.008744	87	71-131	7	0-20	
1,1,1,2-Tetrachloroethane	ND	0.01000	0.01100	110	0.01006	101	75-127	9	0-20	
1,1,1-Trichloroethane	ND	0.01000	0.01109	111	0.01009	101	72-132	9	0-20	
1,1,2,2-Tetrachloroethane	ND	0.01000	0.01053	105	0.009902	99	75-132	6	0-20	
1,1,2-Trichloroethane	ND	0.01000	0.01077	108	0.009842	98	75-125	9	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.01000	0.009797	98	0.008720	87	70-130	12	0-20	
1,1-Dichloroethane	ND	0.01000	0.009761	98	0.008982	90	68-128	8	0-20	
1,1-Dichloroethene	ND	0.01000	0.01060	106	0.009817	98	66-126	8	0-20	
1,1-Dichloropropene	ND	0.01000	0.01145	114	0.01031	103	74-134	10	0-20	
1,2,3-Trichlorobenzene	ND	0.01000	0.01066	107	0.01030	103	75-125	3	0-20	
1,2,3-Trichloropropane	ND	0.01000	0.01039	104	0.009976	100	75-125	4	0-20	
1,2,4-Trichlorobenzene	ND	0.01000	0.01088	109	0.01051	105	75-125	3	0-20	
1,2,4-Trimethylbenzene	ND	0.01000	0.01018	102	0.008936	89	75-125	13	0-20	
1,3,5-Trimethylbenzene	ND	0.01000	0.01080	108	0.01014	101	75-127	6	0-20	
c-1,2-Dichloroethene	ND	0.01000	0.01110	111	0.01024	102	75-130	8	0-20	
1,2-Dibromo-3-Chloropropane	ND	0.01000	0.01018	102	0.01005	100	75-127	1	0-20	
1,2-Dibromoethane	ND	0.01000	0.01086	109	0.009946	99	75-126	9	0-20	
1,2-Dichlorobenzene	ND	0.01000	0.01065	106	0.01046	105	75-125	2	0-20	
1,2-Dichloroethane	ND	0.01000	0.01045	104	0.009834	98	75-127	6	0-20	
1,2-Dichloropropane	ND	0.01000	0.01071	107	0.01001	100	75-125	7	0-20	
t-1,2-Dichloroethene	ND	0.01000	0.01139	114	0.01025	102	73-133	11	0-20	
c-1,3-Dichloropropene	ND	0.01000	0.01110	111	0.01045	104	75-128	6	0-20	
1,3-Dichlorobenzene	ND	0.01000	0.01100	110	0.01050	105	75-126	5	0-20	
1,3-Dichloropropane	ND	0.01000	0.01081	108	0.009944	99	75-125	8	0-20	
t-1,3-Dichloropropene	ND	0.01000	0.01149	115	0.01052	105	75-125	9	0-20	
1,4-Dichlorobenzene	ND	0.01000	0.01058	106	0.01015	102	75-125	4	0-20	
2,2-Dichloropropane	ND	0.01000	0.01210	121	0.01074	107	52-160	12	0-20	
2-Chlorotoluene	ND	0.01000	0.01107	111	0.01060	106	75-128	4	0-20	
4-Chlorotoluene	ND	0.01000	0.01069	107	0.01014	101	75-125	5	0-20	
4-Methyl-2-Pentanone	ND	0.01000	0.009756	98	0.01001	100	65-137	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - Spike/Spike Duplicate

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil Gladiola Station

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Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Acetone	ND	0.01000	0.007230	72	0.008017	80	20-180	10	0-52	
Bromobenzene	ND	0.01000	0.01068	107	0.01033	103	75-125	3	0-20	
Bromochloromethane	ND	0.01000	0.01049	105	0.009854	99	75-128	6	0-20	
Bromoform	ND	0.01000	0.01078	108	0.01003	100	71-137	7	0-20	
Bromomethane	ND	0.01000	0.01270	127	0.01221	122	37-181	4	0-22	
Carbon Disulfide	ND	0.01000	0.01062	106	0.009998	100	58-136	6	0-20	
Carbon Tetrachloride	ND	0.01000	0.01151	115	0.01028	103	69-135	11	0-20	
Chlorobenzene	ND	0.01000	0.01074	107	0.01002	100	75-125	7	0-20	
Dibromochloromethane	ND	0.01000	0.01106	111	0.01008	101	75-125	9	0-20	
Chloroethane	ND	0.01000	0.01036	104	0.01019	102	20-180	2	0-20	
Chloroform	ND	0.01000	0.01111	111	0.01012	101	75-128	9	0-20	
Chloromethane	ND	0.01000	0.01068	107	0.01089	109	41-149	2	0-20	
Dibromomethane	ND	0.01000	0.01065	106	0.01005	101	75-129	6	0-20	
Bromodichloromethane	ND	0.01000	0.01090	109	0.01029	103	75-125	6	0-20	
Dichlorodifluoromethane	ND	0.01000	0.007874	79	0.007227	72	28-172	9	0-20	
Hexachloro-1,3-Butadiene	ND	0.01000	0.01072	107	0.01056	106	75-129	1	0-20	
Isopropylbenzene	ND	0.01000	0.01142	114	0.01092	109	75-130	4	0-20	
2-Butanone	ND	0.01000	0.009591	96	0.009630	96	20-180	0	0-40	
Methylene Chloride	ND	0.01000	0.01171	117	0.01083	108	74-128	8	0-20	
2-Hexanone	ND	0.01000	0.01025	102	0.01045	104	74-122	2	0-20	
Naphthalene	ND	0.01000	0.009078	91	0.008974	90	75-136	1	0-20	
n-Butylbenzene	ND	0.01000	0.01144	114	0.01112	111	75-125	3	0-20	
n-Propylbenzene	ND	0.01000	0.01139	114	0.01094	109	75-129	4	0-20	
p-Isopropyltoluene	ND	0.01000	0.01101	110	0.01047	105	75-125	5	0-20	
sec-Butylbenzene	ND	0.01000	0.01141	114	0.01087	109	75-129	5	0-20	
Styrene	ND	0.01000	0.008773	88	0.007119	71	28-166	21	0-30	
tert-Butylbenzene	ND	0.01000	0.01145	114	0.01105	111	75-129	3	0-20	
Tetrachloroethene	ND	0.01000	0.009062	91	0.008430	84	58-124	7	0-20	
Trichloroethene	ND	0.01000	0.01101	110	0.01028	103	75-125	7	0-20	
Trichlorofluoromethane	ND	0.01000	0.009904	99	0.009517	95	68-134	4	0-20	
Vinyl Chloride	ND	0.01000	0.01014	101	0.01020	102	52-142	1	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - PDS/PDSD

Cardno	Date Received: 07/21/18
20505 Crescent Bay Drive	Work Order: 18-07-1591
Lake Forest, CA 92630-8825	Preparation: EPA 3010A Total
	Method: EPA 6010B
Project: ExxonMobil Gladiola Station	Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
W-39-B4/MW30	Sample	Aqueous	ICP 8300	07/30/18 00:00	08/03/18 15:35	180730SA5
W-39-B4/MW30	PDS	Aqueous	ICP 8300	07/30/18 00:00	08/03/18 15:37	180730SA5
W-39-B4/MW30	PDSD	Aqueous	ICP 8300	07/30/18 00:00	08/03/18 15:38	180730SA5

Parameter	Sample Conc.	Spike Added	PDS Conc.	PDS %Rec.	PDSD Conc.	PDSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Arsenic	ND	0.5000	0.4856	97	0.4871	97	75-125	0	0-20	
Barium	0.05900	0.5000	0.5799	104	0.5823	105	75-125	0	0-20	
Cadmium	ND	0.5000	0.5102	102	0.5035	101	75-125	1	0-20	
Chromium	ND	0.5000	0.5095	102	0.5110	102	75-125	0	0-20	
Lead	ND	0.5000	0.5332	107	0.5142	103	75-125	4	0-20	
Selenium	ND	0.5000	0.5419	108	0.4838	97	75-125	11	0-20	
Silver	ND	0.2500	0.2234	89	0.2274	91	75-125	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Sample Duplicate

Cardno	Date Received:	07/21/18
20505 Crescent Bay Drive	Work Order:	18-07-1591
Lake Forest, CA 92630-8825	Preparation:	N/A
	Method:	SM 2320B
Project: ExxonMobil Gladiola Station		Page 1 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-07-1456-3	Sample	Aqueous	PCT 1	N/A	07/24/18 02:19	I0723ALKD2
18-07-1456-3	Sample Duplicate	Aqueous	PCT 1	N/A	07/24/18 02:19	I0723ALKD2
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Alkalinity, Total (as CaCO3)		52.80	52.74	0	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Sample Duplicate

Cardno	Date Received:	07/21/18
20505 Crescent Bay Drive	Work Order:	18-07-1591
Lake Forest, CA 92630-8825	Preparation:	N/A
	Method:	SM 2540 C
Project: ExxonMobil Gladiola Station		Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
18-07-1407-5	Sample	Aqueous	N/A	07/25/18 00:00	07/25/18 16:00	I0725TDSD2
18-07-1407-5	Sample Duplicate	Aqueous	N/A	07/25/18 00:00	07/25/18 16:00	I0725TDSD2
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Solids, Total Dissolved		615.0	630.0	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS

Cardno	Date Received:	07/21/18
20505 Crescent Bay Drive	Work Order:	18-07-1591
Lake Forest, CA 92630-8825	Preparation:	N/A
	Method:	EPA 300.0
Project: ExxonMobil Gladiola Station		Page 1 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-906-8656	LCS	Aqueous	IC 7	N/A	07/23/18 10:41	180723L01
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Sulfate		50.00	48.70	97	90-110	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Cardno	Date Received:	07/21/18
20505 Crescent Bay Drive	Work Order:	18-07-1591
Lake Forest, CA 92630-8825	Preparation:	N/A
	Method:	EPA 300.0
Project: ExxonMobil Gladiola Station		Page 2 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-906-8657	LCS	Aqueous	IC 7	N/A	07/24/18 20:34	180724L02
099-12-906-8657	LCSD	Aqueous	IC 7	N/A	07/24/18 20:52	180724L02

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Sulfate	50.00	48.37	97	47.26	95	90-110	2	0-15	

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RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS/LCSD

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: N/A
Method: SM 2320B

Project: ExxonMobil Gladiola Station

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-17-086-8	LCS	Aqueous	PCT 1	N/A	07/24/18 02:19	I0723ALKB2			
099-17-086-8	LCSD	Aqueous	PCT 1	N/A	07/24/18 02:19	I0723ALKB2			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	100.0	110.3	110	106.5	106	80-120	4	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS/LCSD

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: N/A
Method: SM 2540 C

Project: ExxonMobil Gladiola Station

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-12-180-6312	LCS	Aqueous	N/A	07/25/18	07/25/18 16:00	I0725TDSL1			
099-12-180-6312	LCSD	Aqueous	N/A	07/25/18	07/25/18 16:00	I0725TDSL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Solids, Total Dissolved	100.0	100.0	100	95.00	95	80-120	5	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS/LCSD

Cardno	Date Received:	07/21/18
20505 Crescent Bay Drive	Work Order:	18-07-1591
Lake Forest, CA 92630-8825	Preparation:	N/A
	Method:	SM 4500-Cl C
Project: ExxonMobil Gladiola Station		Page 5 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-05-057-2222	LCS	Aqueous	BUR02	N/A	07/24/18 18:00	I0724CLCL1			
099-05-057-2222	LCSD	Aqueous	BUR02	N/A	07/24/18 18:00	I0724CLCL1			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Chloride	100.0	100.6	101	100.1	100	80-120	0	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 3010A Total
Method: EPA 6010B

Project: ExxonMobil Gladiola Station

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
097-01-003-16987	LCS	Aqueous	ICP 8300	07/30/18	08/03/18 14:55	180730LA5
Parameter		Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
Arsenic		0.5000	0.4415	88	80-120	
Barium		0.5000	0.5081	102	80-120	
Cadmium		0.5000	0.5186	104	80-120	
Chromium		0.5000	0.4881	98	80-120	
Lead		0.5000	0.5019	100	80-120	
Selenium		0.5000	0.4333	87	80-120	
Silver		0.2500	0.2235	89	80-120	

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RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS

Cardno	Date Received:	07/21/18
20505 Crescent Bay Drive	Work Order:	18-07-1591
Lake Forest, CA 92630-8825	Preparation:	EPA 7470A Total
	Method:	EPA 7470A
Project: ExxonMobil Gladiola Station		Page 7 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-457-382	LCS	Aqueous	Mercury 07	08/02/18	08/02/18 14:37	180802LA1M
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
Mercury		0.01000	0.008974	90	80-120	

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS/LCSD

Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Date Received: 07/21/18
Work Order: 18-07-1591
Preparation: EPA 3510C
Method: EPA 8270C SIM PAHS

Project: ExxonMobil Gladiola Station

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-06-008-1064	LCS	Aqueous	GC/MS EEE	07/25/18	07/26/18 15:21	180725L01
099-06-008-1064	LCSD	Aqueous	GC/MS EEE	07/25/18	07/26/18 15:41	180725L01

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Naphthalene	0.002000	0.001772	89	0.001763	88	21-133	2-152	0	0-25	
2-Methylnaphthalene	0.002000	0.001834	92	0.001816	91	21-140	1-160	1	0-25	
1-Methylnaphthalene	0.002000	0.001825	91	0.001826	91	20-140	0-160	0	0-25	
Acenaphthylene	0.002000	0.001684	84	0.001727	86	33-145	14-164	2	0-25	
Acenaphthene	0.002000	0.001755	88	0.001824	91	55-121	44-132	4	0-25	
Fluorene	0.002000	0.001827	91	0.001932	97	59-121	49-131	6	0-25	
Phenanthrene	0.002000	0.001956	98	0.001987	99	54-120	43-131	2	0-25	
Anthracene	0.002000	0.001907	95	0.001954	98	27-133	9-151	2	0-25	
Fluoranthene	0.002000	0.001974	99	0.001987	99	26-137	8-156	1	0-25	
Pyrene	0.002000	0.001940	97	0.001947	97	45-129	31-143	0	0-25	
Benzo (a) Anthracene	0.002000	0.001990	100	0.002008	100	33-143	15-161	1	0-25	
Chrysene	0.002000	0.001964	98	0.001995	100	17-168	0-193	2	0-25	
Benzo (k) Fluoranthene	0.002000	0.001965	98	0.001992	100	24-159	2-182	1	0-25	
Benzo (b) Fluoranthene	0.002000	0.002010	100	0.002051	103	24-159	2-182	2	0-25	
Benzo (a) Pyrene	0.002000	0.002048	102	0.002106	105	17-163	0-187	3	0-25	
Indeno (1,2,3-c,d) Pyrene	0.002000	0.001966	98	0.002028	101	25-175	0-200	3	0-25	
Dibenz (a,h) Anthracene	0.002000	0.001865	93	0.002054	103	25-175	0-200	10	0-25	
Benzo (g,h,i) Perylene	0.002000	0.002193	110	0.002253	113	25-157	3-179	3	0-25	

Total number of LCS compounds: 18

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS

Cardno	Date Received: 07/21/18
20505 Crescent Bay Drive	Work Order: 18-07-1591
Lake Forest, CA 92630-8825	Preparation: EPA 5030C
	Method: EPA 8260B
Project: ExxonMobil Gladiola Station	Page 9 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-878-751	LCS	Aqueous	GC/MS UU	07/30/18	07/30/18 20:24	180730L031
Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	0.01000	0.01098	110	80-120	73-127	
Toluene	0.01000	0.01083	108	80-120	73-127	
Ethylbenzene	0.01000	0.009662	97	80-120	73-127	
o-Xylene	0.01000	0.009707	97	80-120	73-127	
p/m-Xylene	0.02000	0.01918	96	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	0.01000	0.008923	89	75-123	67-131	
1,1-Dichloroethene	0.01000	0.01026	103	77-120	70-127	
1,2-Dibromoethane	0.01000	0.009278	93	80-120	73-127	
1,2-Dichlorobenzene	0.01000	0.009419	94	80-120	73-127	
1,2-Dichloroethane	0.01000	0.01063	106	80-122	73-129	
Carbon Tetrachloride	0.01000	0.01024	102	80-129	72-137	
Chlorobenzene	0.01000	0.009591	96	80-120	73-127	
Trichloroethene	0.01000	0.01060	106	80-120	73-127	
Vinyl Chloride	0.01000	0.01215	122	63-135	51-147	

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits



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Quality Control - LCS

Cardno	Date Received:	07/21/18
20505 Crescent Bay Drive	Work Order:	18-07-1591
Lake Forest, CA 92630-8825	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: ExxonMobil Gladiola Station		Page 10 of 10

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-878-754	LCS	Aqueous	GC/MS UU	08/01/18	08/01/18 15:49	180801L042
Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	0.01000	0.009745	97	80-120	73-127	
Toluene	0.01000	0.009920	99	80-120	73-127	
Ethylbenzene	0.01000	0.01028	103	80-120	73-127	
o-Xylene	0.01000	0.01034	103	80-120	73-127	
p/m-Xylene	0.02000	0.02007	100	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	0.01000	0.008481	85	75-123	67-131	
1,1-Dichloroethene	0.01000	0.008728	87	77-120	70-127	
1,2-Dibromoethane	0.01000	0.01003	100	80-120	73-127	
1,2-Dichlorobenzene	0.01000	0.01023	102	80-120	73-127	
1,2-Dichloroethane	0.01000	0.009412	94	80-122	73-129	
Carbon Tetrachloride	0.01000	0.009322	93	80-129	72-137	
Chlorobenzene	0.01000	0.009908	99	80-120	73-127	
Trichloroethene	0.01000	0.009583	96	80-120	73-127	
Vinyl Chloride	0.01000	0.008906	89	63-135	51-147	

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits



Sample Analysis Summary Report

Work Order: 18-07-1591 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 300.0	N/A	27	IC 7	1
EPA 6010B	EPA 3010A Total	1080	ICP 8300	1
EPA 7470A	EPA 7470A Total	868	Mercury 07	1
EPA 8260B	EPA 5030C	1162	GC/MS UU	2
EPA 8270C SIM PAHs	EPA 3510C	928	GC/MS EEE	1
SM 2320B	N/A	834	PCT 1	1
SM 2540 C	N/A	1136	N/A	1
SM 4500-CI C	N/A	1086	BUR02	1


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Location 1: 7440 Lincoln Way, Garden Grove, CA 92841
Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841



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Glossary of Terms and Qualifiers

Work Order: 18-07-1591

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Qualifiers	Definition
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDS or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stds.
HO	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS was in control.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
SG	A silica gel cleanup procedure was performed.
SN	See applicable analysis comment.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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Cecile L de Guia

From: Vincent Nguyen <Vincent.Nguyen@cardno.com>
Sent: Monday, July 23, 2018 1:03 PM
To: Cecile L de Guia
Cc: Stephen Hunter; David Purdy
Subject: RE: EMES Gladia Station; 18-07-1591
Attachments: 18-07-1591 Revised.pdf

EXTERNAL EMAIL*

Hi Cecile,

Attached is the revised Chain of Custody document.

Let me know if there are other revisions needed.

Thanks,

Vincent Nguyen

ENVIRONMENTAL SCIENTIST I
CARDNO

Direct +1 949 457 8950 Mobile +1 949 532 3228 Fax +1 949 457 8956
Address 20505 Crescent Bay Drive , Lake Forest, CA 92630
Email vincent.nguyen@cardno.com Web www.cardno.com

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From: Cecile L de Guia [<mailto:CecileLdeGuia@eurofinsUS.com>]
Sent: Monday, July 23, 2018 12:28 PM
To: David Purdy <dave.purdy@cardno.com>; Vincent Nguyen <Vincent.Nguyen@cardno.com>
Cc: Stephen Hunter <stephen.hunter@cardno.com>
Subject: EMES Gladia Station; 18-07-1591

Good Afternoon,

We received the water samples for the attached COC on 07/21/2018. However, sample #4 (W-41-B5/MW31) was not received. This sample was on another COC, WO# 18-07-1592-2. Please cancel #4 from the attached COC.

The trip blank was marked for all analyses but we only received 2 VOA vials. Please cancel the other methods for Trip Blanks.

Thank you.

Best regards,

Cecile de Guia
Eurofins Calscience, LLC
7440 Lincoln Way
Garden Grove, CA 92841
USA
Phone: +1 714 895 5494

Email: ceciledeguia@eurofinsUS.com
Website: www.eurofinsUS.com/Calscience

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GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 FAX: (714) 894-7501

Site Name
Provide MRN for retail or AFE for major projects
Retail Project (MRN)
Major Project (AFE)
Project Name ExxonMobil Gladiola Station

CHAIN OF CUSTODY RECORD
DATE: 07/20/18
PAGE: 1 OF 21

ExxonMobil Engr: Maria Madden

LABORATORY CLIENT		GLOBAL ID # COE LT LOG CODE:		EMES Sub Agreement #A2604415										
Cardno		PROJECT CONTACT		PROJECT NAME										
25371 Comemrcentre Drive, Suite 250		David Purdy		18-07-1591										
CITY		SAMPLER(S)		COOLER RECEIPT										
Lake Forest, CA 92630		Stephen Hunter, Vincent Nguyen		Temp = °C										
TEL: 949-457-8941		FAX: 949-457-8956		dave.purdy@cardno.com										
TURNAROUND TIME		DATE		TIME										
SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS		07/19/18		0900										
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)		07/19/18		1150										
☐ RWQCB REPORTING		07/19/18		1430										
☐ ARCHIVE SAMPLES UNTIL		07/19/18		1720										
SPECIAL INSTRUCTIONS		TRIP BLANK		QCTB										
New Mexico Site		TRIP BLANK		PA										
Report J values.		TRIP BLANK		PA										
LAB USE ONLY	SAMPLE ID	Field Point Name	SAMPLING DATE	TIME	MAT- RUX	NO. OF CONT.	EPA 8260B LL VOCs only (TC# 6401)	EPA 8270C SIM PAHs (TC# 4741)	EPA 6010B As, Ba, Cd, Cr, Pb, Se and Ag only (TC# 2516)	EPA 7470A Mercury (TC# 5096)	EPA 300.0 Sulfate (TC# 5431)	SM 2320B Alkalinity (TC# 6512) and SM 4500-Cl C Chloride (TC# 755)	SM 2540C Total Dissolved Solids (TC# 4942)	CONTAINER TYPE
1	W-39-B4/MW30	B4/MW30	07/19/18	0900	W	12	X	X	X	X	X	X	X	5 vials with HCl, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic, 1L Plastic
2	W-40-B2/MW28	B2/MW28	07/19/18	1150	W	11	X	X	X	X	X	X	X	5 vials with HCl, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic
3	W-42-B6/MW32	B6/MW32	07/19/18	1430	W	11	X	X	X	X	X	X	X	5 vials with HCl, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic
4	W-41-B5/MW31	B5/MW31	07/19/18	1720	W	11	X	X	X	X	X	X	X	5 vials with HCl, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic
5	TRIP BLANK	QCTB	/	/	W	12	X	X	X	X	X	X	X	5 vials with HCl, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic
6	TRIP BLANK	PA	/	/	W	11	X	X	X	X	X	X	X	5 vials with HCl, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic
7	TRIP BLANK	PA	/	/	W	11	X	X	X	X	X	X	X	5 vials with HCl, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic
8	TRIP BLANK	PA	/	/	W	11	X	X	X	X	X	X	X	5 vials with HCl, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic
Relinquished by (Signature) <i>Stephen Hunter</i>							Received by (Signature) <i>Red Ex</i>							
Relinquished by (Signature)							Received by (Signature)							
Relinquished by (Signature)							Received by (Signature)							

COC/Gladiola Station-NM Site COC-13 samples

CHAIN OF CUSTODY RECORD
DATE: 07/20/18
PAGE: 1 OF 21

Site Name
Provide MRN for retail or AFE for major projects
Retail Project (MRN)
Major Project (AFE)
Project Name
ExxonMobil Gladiola Station

7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 FAX: (714) 894-7501

ExxonMobil Engr: Maria Madden

LABORATORY CLIENT: Cardno		GLOBAL ID # COE LT LOG CODE:		EMES Sub Agreement #A2604415	
ADDRESS: 25371 Comercentre Drive, Suite 250		PROJECT CONTACT David Purdy		LEAD OR COORDINATOR 18-07-1591	
CITY: Lake Forest, CA 92630		SAMPLER(S): Stephen Hunter, Vincent Nguyen		COOLER RECEIPT Temp = _____ °C	
TEL: 949-457-8941		FAX: 949-457-8956		TURNAROUND TIME ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS	
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) ☐ RWQCB REPORTING SPECIAL INSTRUCTIONS: New Mexico Site		ARCHIVE SAMPLES UNTIL _____		REQUESTED ANALYSIS	
Report J values.					
LAB USE ONLY	SAMPLE ID	Field Point Name	SAMPLING DATE	MAT- RIX	NO OF CONT.
1	W-39-B4/MW30	B4/MW30	07/19/18 0900	W	12
2	W-40-B2/MW28	B2/MW28	07/19/18 1150	W	11
3	W-42-B6/MW32	B6/MW32	07/19/18 1430	W	11
4	W-41-B5/MW31	B5/MW31	07/19/18 1720	W	11
5	TRIP BLANK	QCTB	/	W	2
6	TRIP BLANK			W	11
7	NA			W	11
8				W	11
Relinquished by (Signature)		Received by (Signature)		Date, & Time	
Relinquished by (Signature)		Received by (Signature)		Date, & Time	
Relinquished by (Signature)		Received by (Signature)		Date, & Time	

1591

Recipient's Name <i>Please print.</i>	Phone Number
ORIGIN ID: H0BA (949) 457-8950 CARDINO 20505 CRESCENT BAY DR LAKE FOREST, CA 92630 UNITED STATES US	SHIP DATE: 20JUL18 ACTWGT: 35.70 LB CAD: 006894246/SSFE1904 DIMS: 17x17x17 IN BILL THIRD PARTY

Part # 156297-433-ARROW EXPRESS 01/19

TO

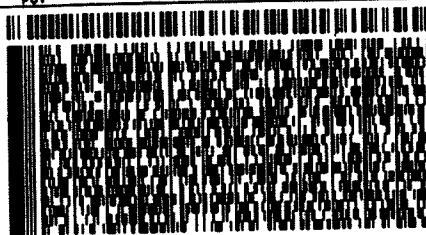
EUROFINS CALSCIENCE INC
7440 LINCOLN WAY**GARDEN GROVE CA 9284**

(714) 892-5626

REF:

INVT
PQ:

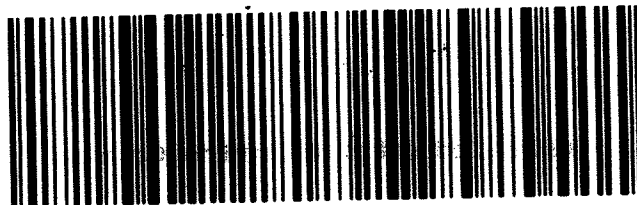
DEPT



B 7980 07.21

3 12.00

138 ST 25

5 of 5
MP# 7727 7903 7980
0263
Metr# 7727 7903 7947**SATURDAY 12:00P**
PRIORITY OVERNIGHT**X0 APVA**92841
CA-US SNA



Calscience

WORK ORDER NUMBER: 18-07-1591

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Cardno

DATE: 07/21/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: -0.5°C); Temperature (w/o CF): 2.5 °C (w/ CF): 2.0 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 802

CUSTODY SEAL:

Cooler ☒ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/AChecked by: 802Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: 778

SAMPLE CONDITION:

Yes No N/A

Chain-of-Custody (COC) document(s) received with samples ☒ ☐ ☐COC document(s) received complete ☒ ☐ ☐☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ ☐ ☐Sample container label(s) consistent with COC ☐ ☒ ☐Sample container(s) intact and in good condition ☒ ☐ ☐Proper containers for analyses requested ☒ ☐ ☐Sufficient volume/mass for analyses requested ☒ ☐ ☐Samples received within holding time ☒ ☐ ☐

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ ☐ ☒Proper preservation chemical(s) noted on COC and/or sample container ☒ ☐ ☐

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☒ ☐ ☐Container(s) for certain analysis free of headspace ☒ ☐ ☐☒ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ ☐ ☒

CONTAINER TYPE:

(Trip Blank Lot Number: 180709B)Aqueous: ☐ VOA ☒ VOA_h ☐ VOAn₂ ☐ 100PJ ☐ 100PJn₂ ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☒ 125PB ☐ 125PBznna (pH__9)☐ 250AGB ☐ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☒ 250PBn (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGBn₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 78s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOHReviewed by: 1017



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Page 54 of 54
WORK ORDER NUMBER: 18-07-1591

SAMPLE ANOMALY REPORT

DATE: 07/21/2018

SAMPLES, CONTAINERS, AND LABELS:

- ☒ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ pH outside acceptable range (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☒ Client sample label(s) do not match COC (comment)
- ☐ Project information
- ☐ Client sample ID
- ☐ Sampling date and/or time
- ☐ Number of container(s)
- ☒ Requested analysis
- ☐ Sample container(s) compromised (comment)
- ☐ Broken
- ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
- ☐ Flat
- ☐ Very low in volume
- ☐ Leaking (not transferred; duplicate bag submitted)
- ☐ Leaking (transferred into ECI Tedlar™ bags*)
- ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

MISCELLANEOUS: (Describe)

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

Comments: _____

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

Comments

(4) not received.
(same ID, date and time
as 18-07-1592-2)

(5) Trip blank received
2 vials for all tests

Comments

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Reported by: 78Reviewed by: 107



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**WORK ORDER NUMBER: 18-07-1592***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For**Client:** Cardno**Client Project Name:** ExxonMobil Gladiola Station**Attention:** David Purdy
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825Approved for release on 08/06/2018 by:
Cecile deGuia
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



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Contents

Client Project Name: ExxonMobil Gladiola Station
Work Order Number: 18-07-1592

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The difference is service

Work Order: 18-07-1592

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Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/21/18. They were assigned to Work Order 18-07-1592.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.


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The difference is service

Client: Cardno	Work Order: 18-07-1592
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	PO Number:
	Date/Time Received: 07/21/18 11:30
	Number of Containers: 34
Attn: David Purdy	

Sample Summary

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-39-B1/MW27	18-07-1592-1	07/19/18 15:00	11	Aqueous
W-41-B5/MW31	18-07-1592-2	07/19/18 17:20	11	Aqueous
W-39-B3/MW29	18-07-1592-3	07/19/18 11:30	11	Aqueous
TRIP BLANK	18-07-1592-4	07/19/18 00:00	1	Aqueous

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: 1 (W-39-B1/MW27, Aqueous) Sampled: 07/19/18 15:00									
EPA 300.0 Anions (Extraction Method: N/A) Container - F									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Sulfate	130		mg/L	0.98	2.0	2.00	07/25/18 01:28	EPA 300.0	180724L02
SM 2320B Alkalinity (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Alkalinity, Total (as CaCO3)	170		mg/L	1.7	5.0	1.00	07/24/18 02:19	SM 2320B	I0723ALKB2
SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Solids, Total Dissolved	980		mg/L	0.870	1.00	1.00	07/24/18 18:00	SM 2540 C	I0724TDSL3
SM 4500-CL C Chloride (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Chloride	280		mg/L	3.8	10	5.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Arsenic	0.0226		mg/L	0.00438	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Barium	0.0521		mg/L	0.00296	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Cadmium	ND		mg/L	0.00269	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Chromium	ND		mg/L	0.00271	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Lead	ND		mg/L	0.00406	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Selenium	0.0519		mg/L	0.00699	0.0150	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Silver	ND		mg/L	0.00139	0.00500	1.00	08/03/18 15:45	EPA 6010B	180730LA5
EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Mercury	0.000115	B,J	mg/L	0.000045 3	0.000200	1.00	08/02/18 15:07	EPA 7470A	180802LA1M
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - I									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Naphthalene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
2-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Acenaphthylene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Acenaphthene	ND		mg/L	0.000058	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Fluorene	ND		mg/L	0.000070	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Phenanthrene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Fluoranthene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		mg/L	0.000069	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Chrysene	ND		mg/L	0.000064	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		mg/L	0.000077	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		mg/L	0.000082	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Benzo (a) Pyrene	ND		mg/L	0.000098	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	0.000079	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		mg/L	0.000074	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		mg/L	0.000092	0.00019	1.00	07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	87%						07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	100%						07/26/18 19:46	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	89%						07/26/18 19:46	EPA 8270C SIM PAHs	180725L01

EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - A

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Benzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Toluene	0.00025	J	mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Ethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
o-Xylene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
p/m-Xylene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Xylenes (total)	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	0.00020	0.0010	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,1,1,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,1,1-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,1,2,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,1,2-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	0.00024	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,1-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,1-Dichloroethene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,1-Dichloropropene	ND		mg/L	0.00030	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,2,3-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,2,3-Trichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,2,4-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042



Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
1,2,4-Trimethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,3,5-Trimethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
c-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,2-Dibromo-3-Chloropropane	ND		mg/L	0.0020	0.0050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,2-Dibromoethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,2-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,2-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,2-Dichloropropane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
t-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
c-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,3-Dichlorobenzene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,3-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 01:42	EPA 8260B	180801L042
t-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
1,4-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
2,2-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 01:42	EPA 8260B	180801L042
2-Chlorotoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
4-Chlorotoluene	ND		mg/L	0.00036	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
4-Methyl-2-Pentanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Acetone	0.0045	J	mg/L	0.0040	0.010	1.00	08/02/18 01:42	EPA 8260B	180801L042
Bromobenzene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Bromochloromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 01:42	EPA 8260B	180801L042
Bromoform	ND		mg/L	0.00025	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Bromomethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 01:42	EPA 8260B	180801L042
Carbon Disulfide	ND		mg/L	0.00040	0.0010	1.00	08/02/18 01:42	EPA 8260B	180801L042
Carbon Tetrachloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Chlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Dibromochloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Chloroethane	ND		mg/L	0.00032	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Chloroform	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Chloromethane	ND		mg/L	0.00029	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Dibromomethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Bromodichloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Dichlorodifluoromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 01:42	EPA 8260B	180801L042
Hexachloro-1,3-Butadiene	ND		mg/L	0.00080	0.0020	1.00	08/02/18 01:42	EPA 8260B	180801L042
Isopropylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
2-Butanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Methylene Chloride	ND		mg/L	0.00080	0.0010	1.00	08/02/18 01:42	EPA 8260B	180801L042
2-Hexanone	ND		mg/L	0.0040	0.010	1.00	08/02/18 01:42	EPA 8260B	180801L042
Naphthalene	ND		mg/L	0.00040	0.010	1.00	08/02/18 01:42	EPA 8260B	180801L042
n-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
n-Propylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
p-Isopropyltoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
sec-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Styrene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
tert-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Tetrachloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Trichloroethene	ND		mg/L	0.00029	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Trichlorofluoromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Vinyl Chloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 01:42	EPA 8260B	180801L042
Surr: 1,4-Bromofluorobenzene (68-120%)	93%						08/02/18 01:42	EPA 8260B	180801L042
Surr: Dibromofluoromethane (80-127%)	104%						08/02/18 01:42	EPA 8260B	180801L042
Surr: 1,2-Dichloroethane-d4 (80-128%)	103%						08/02/18 01:42	EPA 8260B	180801L042
Surr: Toluene-d8 (80-120%)	100%						08/02/18 01:42	EPA 8260B	180801L042
Sample ID: 2 (W-41-B5/MW31, Aqueous) Sampled: 07/19/18 17:20									
EPA 300.0 Anions (Extraction Method: N/A) Container - F									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Sulfate	150		mg/L	0.98	2.0	2.00	07/25/18 01:47	EPA 300.0	180724L02
SM 2320B Alkalinity (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Alkalinity, Total (as CaCO3)	250		mg/L	1.7	5.0	1.00	07/24/18 02:19	SM 2320B	I0723ALKB2
SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Solids, Total Dissolved	735		mg/L	0.870	1.00	1.00	07/24/18 18:00	SM 2540 C	I0724TDSL3
SM 4500-CL C Chloride (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Chloride	120		mg/L	0.76	2.0	1.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Arsenic	ND		mg/L	0.00438	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Barium	0.0633		mg/L	0.00296	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Cadmium	ND		mg/L	0.00269	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Chromium	ND		mg/L	0.00271	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Lead	ND		mg/L	0.00406	0.0100	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Selenium	0.0202		mg/L	0.00699	0.0150	1.00	08/03/18 15:45	EPA 6010B	180730LA5
Silver	0.00222	J	mg/L	0.00139	0.00500	1.00	08/03/18 15:45	EPA 6010B	180730LA5
EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Mercury	0.000103	B,J	mg/L	0.000045 3	0.000200	1.00	08/02/18 15:09	EPA 7470A	180802LA1M
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - I									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Naphthalene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
2-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Acenaphthylene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Acenaphthene	ND		mg/L	0.000058	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Fluorene	0.00017	J	mg/L	0.000070	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Phenanthrene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Fluoranthene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		mg/L	0.000069	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Chrysene	ND		mg/L	0.000064	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		mg/L	0.000077	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		mg/L	0.000082	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Benzo (a) Pyrene	ND		mg/L	0.000098	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	0.000079	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		mg/L	0.000074	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		mg/L	0.000092	0.00019	1.00	07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	77%						07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	88%						07/26/18 20:06	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	85%						07/26/18 20:06	EPA 8270C SIM PAHs	180725L01

EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - A

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Benzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Toluene	0.00039	J	mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Ethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
o-Xylene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
p/m-Xylene	0.0010		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Xylenes (total)	0.0010		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	0.00020	0.0010	1.00	08/02/18 13:33	EPA 8260B	180802L036



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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
1,1,1,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,1,1-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,1,2,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,1,2-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	0.00024	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,1-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,1-Dichloroethene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,1-Dichloropropene	ND		mg/L	0.00030	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,2,3-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,2,3-Trichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,2,4-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,2,4-Trimethylbenzene	0.0019		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,3,5-Trimethylbenzene	0.00091		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
c-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,2-Dibromo-3-Chloropropane	ND		mg/L	0.0020	0.0050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,2-Dibromoethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,2-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,2-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,2-Dichloropropane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
t-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
c-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,3-Dichlorobenzene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,3-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 13:33	EPA 8260B	180802L036
t-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
1,4-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
2,2-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 13:33	EPA 8260B	180802L036
2-Chlorotoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
4-Chlorotoluene	ND		mg/L	0.00036	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
4-Methyl-2-Pentanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Acetone	ND		mg/L	0.0040	0.010	1.00	08/02/18 13:33	EPA 8260B	180802L036
Bromobenzene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Bromochloromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 13:33	EPA 8260B	180802L036
Bromoform	ND		mg/L	0.00025	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Bromomethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 13:33	EPA 8260B	180802L036
Carbon Disulfide	ND		mg/L	0.00040	0.0010	1.00	08/02/18 13:33	EPA 8260B	180802L036
Carbon Tetrachloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Chlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Dibromochloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Chloroethane	ND		mg/L	0.00032	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Chloroform	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Chloromethane	ND		mg/L	0.00029	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Dibromomethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Bromodichloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Dichlorodifluoromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 13:33	EPA 8260B	180802L036
Hexachloro-1,3-Butadiene	ND		mg/L	0.00080	0.0020	1.00	08/02/18 13:33	EPA 8260B	180802L036
Isopropylbenzene	0.00029	J	mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
2-Butanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Methylene Chloride	ND		mg/L	0.00080	0.0010	1.00	08/02/18 13:33	EPA 8260B	180802L036
2-Hexanone	ND		mg/L	0.0040	0.010	1.00	08/02/18 13:33	EPA 8260B	180802L036
Naphthalene	ND		mg/L	0.00040	0.010	1.00	08/02/18 13:33	EPA 8260B	180802L036
n-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
n-Propylbenzene	0.00022	J	mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
p-Isopropyltoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
sec-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Styrene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
tert-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Tetrachloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Trichloroethene	ND		mg/L	0.00029	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Trichlorofluoromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036
Vinyl Chloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 13:33	EPA 8260B	180802L036

Surr: 1,4-Bromofluorobenzene (68-120%)	102%						08/02/18 13:33	EPA 8260B	180802L036
Surr: Dibromofluoromethane (80-127%)	102%						08/02/18 13:33	EPA 8260B	180802L036
Surr: 1,2-Dichloroethane-d4 (80-128%)	101%						08/02/18 13:33	EPA 8260B	180802L036
Surr: Toluene-d8 (80-120%)	101%						08/02/18 13:33	EPA 8260B	180802L036

Sample ID: 3 (W-39-B3/MW29, Aqueous) Sampled: 07/19/18 11:30

EPA 300.0 Anions (Extraction Method: N/A) Container - F

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Sulfate	100		mg/L	0.98	2.0	2.00	07/25/18 02:05	EPA 300.0	180724L02
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SM 2320B Alkalinity (Extraction Method: N/A) Container - G

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Alkalinity, Total (as CaCO3)	170		mg/L	1.7	5.0	1.00	07/24/18 20:30	SM 2320B	I0724ALKB1
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SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Solids, Total Dissolved	805		mg/L	0.870	1.00	1.00	07/24/18 18:00	SM 2540 C	I0724TDSL3
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SM 4500-CL C Chloride (Extraction Method: N/A) Container - G

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Chloride	190		mg/L	0.76	2.0	1.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
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EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Arsenic	0.0213		mg/L	0.00438	0.0100	1.00	08/03/18 15:46	EPA 6010B	180730LA5
Barium	0.0809		mg/L	0.00296	0.0100	1.00	08/03/18 15:46	EPA 6010B	180730LA5
Cadmium	ND		mg/L	0.00269	0.0100	1.00	08/03/18 15:46	EPA 6010B	180730LA5



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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Chromium	ND		mg/L	0.00271	0.0100	1.00	08/03/18 15:46	EPA 6010B	180730LA5
Lead	ND		mg/L	0.00406	0.0100	1.00	08/03/18 15:46	EPA 6010B	180730LA5
Selenium	0.0282		mg/L	0.00699	0.0150	1.00	08/03/18 15:46	EPA 6010B	180730LA5
Silver	0.00145	J	mg/L	0.00139	0.00500	1.00	08/03/18 15:46	EPA 6010B	180730LA5
EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Mercury	0.000116	B,J	mg/L	0.000045 3	0.000200	1.00	08/02/18 15:16	EPA 7470A	180802LA1M
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - I									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Naphthalene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
2-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Acenaphthylene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Acenaphthene	ND		mg/L	0.000058	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Fluorene	ND		mg/L	0.000070	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Phenanthrene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Fluoranthene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		mg/L	0.000069	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Chrysene	ND		mg/L	0.000064	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		mg/L	0.000077	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		mg/L	0.000082	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Benzo (a) Pyrene	ND		mg/L	0.000098	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	0.000079	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		mg/L	0.000074	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		mg/L	0.000092	0.00019	1.00	07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	71%						07/26/18 20:27	EPA 8270C SIM PAHs	180725L01

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Surr: 2-Fluorobiphenyl (33-144%)	78%						07/26/18 20:27	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	82%						07/26/18 20:27	EPA 8270C SIM PAHs	180725L01

EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - A

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Benzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Toluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Ethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
o-Xylene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
p/m-Xylene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Xylenes (total)	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	0.00020	0.0010	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,1,1,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,1,1-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,1,2,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,1,2-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	0.00024	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,1-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,1-Dichloroethene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,1-Dichloropropene	ND		mg/L	0.00030	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,2,3-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,2,3-Trichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,2,4-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,2,4-Trimethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,3,5-Trimethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
c-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,2-Dibromo-3-Chloropropane	ND		mg/L	0.0020	0.0050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,2-Dibromoethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,2-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,2-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,2-Dichloropropane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
t-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
c-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,3-Dichlorobenzene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,3-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 14:03	EPA 8260B	180802L036
t-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
1,4-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
2,2-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 14:03	EPA 8260B	180802L036
2-Chlorotoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
4-Chlorotoluene	ND		mg/L	0.00036	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
4-Methyl-2-Pentanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 14:03	EPA 8260B	180802L036

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Acetone	ND		mg/L	0.0040	0.010	1.00	08/02/18 14:03	EPA 8260B	180802L036
Bromobenzene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Bromochloromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 14:03	EPA 8260B	180802L036
Bromoform	ND		mg/L	0.00025	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Bromomethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 14:03	EPA 8260B	180802L036
Carbon Disulfide	ND		mg/L	0.00040	0.0010	1.00	08/02/18 14:03	EPA 8260B	180802L036
Carbon Tetrachloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Chlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Dibromochloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Chloroethane	ND		mg/L	0.00032	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Chloroform	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Chloromethane	ND		mg/L	0.00029	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Dibromomethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Bromodichloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Dichlorodifluoromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 14:03	EPA 8260B	180802L036
Hexachloro-1,3-Butadiene	ND		mg/L	0.00080	0.0020	1.00	08/02/18 14:03	EPA 8260B	180802L036
Isopropylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
2-Butanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Methylene Chloride	ND		mg/L	0.00080	0.0010	1.00	08/02/18 14:03	EPA 8260B	180802L036
2-Hexanone	ND		mg/L	0.0040	0.010	1.00	08/02/18 14:03	EPA 8260B	180802L036
Naphthalene	ND		mg/L	0.00040	0.010	1.00	08/02/18 14:03	EPA 8260B	180802L036
n-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
n-Propylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
p-Isopropyltoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
sec-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Styrene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
tert-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Tetrachloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Trichloroethene	ND		mg/L	0.00029	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Trichlorofluoromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Vinyl Chloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 14:03	EPA 8260B	180802L036
Surr: 1,4-Bromofluorobenzene (68-120%)							08/02/18 14:03	EPA 8260B	180802L036
Surr: Dibromofluoromethane (80-127%)							08/02/18 14:03	EPA 8260B	180802L036
Surr: 1,2-Dichloroethane-d4 (80-128%)							08/02/18 14:03	EPA 8260B	180802L036
Surr: Toluene-d8 (80-120%)							08/02/18 14:03	EPA 8260B	180802L036

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
EPA 300.0 Anions						
099-12-906-8657						
Sulfate	ND		mg/L	180724L02	099-12-906-8657	07/24/18 20:16
SM 2320B Alkalinity						
099-17-086-21						
Alkalinity, Total (as CaCO3)	ND		mg/L	I0723ALKB2	099-17-086-21	07/24/18 02:19
SM 2320B Alkalinity						
099-17-086-18						
Alkalinity, Total (as CaCO3)	ND		mg/L	I0723ALKB2	099-17-086-18	07/24/18 02:19
SM 2320B Alkalinity						
099-17-086-14						
Alkalinity, Total (as CaCO3)	ND		mg/L	I0724ALKB1	099-17-086-14	07/24/18 20:30
SM 2540 C Total Dissolved Solids						
099-12-180-6309						
Solids, Total Dissolved	ND		mg/L	I0724TDSL3	099-12-180-6309	07/24/18 18:00
SM 4500-CL C Chloride						
099-05-057-2222						
Chloride	ND		mg/L	I0724CLCL1	099-05-057-2222	07/24/18 18:00
EPA 6010B ICP Metals						
097-01-003-16987						
Arsenic	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Barium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Cadmium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Chromium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Lead	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Selenium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Silver	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
EPA 7470A Mercury						
099-12-457-382						
Mercury	0.0000644	J	mg/L	180802LA1M	099-12-457-382	08/02/18 14:34
EPA 8270C SIM PAHs						
099-06-008-1064						
Naphthalene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
2-Methylnaphthalene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
1-Methylnaphthalene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Acenaphthylene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Acenaphthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
Fluorene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Phenanthrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Anthracene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Fluoranthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Pyrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (a) Anthracene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Chrysene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (k) Fluoranthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (b) Fluoranthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (a) Pyrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Dibenz (a,h) Anthracene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (g,h,i) Perylene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Surr: Nitrobenzene-d5 (28-139%)	85%			180725L01	099-06-008-1064	07/26/18 15:00
Surr: 2-Fluorobiphenyl (33-144%)	84%			180725L01	099-06-008-1064	07/26/18 15:00
Surr: p-Terphenyl-d14 (23-160%)	93%			180725L01	099-06-008-1064	07/26/18 15:00

EPA 8260B Volatile Organics

099-12-878-754

Benzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Toluene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Ethylbenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
o-Xylene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
p/m-Xylene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Xylenes (total)	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,1,1,2-Tetrachloroethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,1,1-Trichloroethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,1,2,2-Tetrachloroethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,1,2-Trichloroethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,1-Dichloroethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,1-Dichloroethene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,1-Dichloropropene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,2,3-Trichlorobenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,2,3-Trichloropropane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,2,4-Trichlorobenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,2,4-Trimethylbenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,3,5-Trimethylbenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
c-1,2-Dichloroethene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,2-Dibromo-3-Chloropropane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12



Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
1,2-Dibromoethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,2-Dichlorobenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,2-Dichloroethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,2-Dichloropropane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
t-1,2-Dichloroethene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
c-1,3-Dichloropropene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,3-Dichlorobenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,3-Dichloropropane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
t-1,3-Dichloropropene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
1,4-Dichlorobenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
2,2-Dichloropropane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
2-Chlorotoluene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
4-Chlorotoluene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
4-Methyl-2-Pentanone	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Acetone	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Bromobenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Bromochloromethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Bromoform	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Bromomethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Carbon Disulfide	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Carbon Tetrachloride	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Chlorobenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Dibromochloromethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Chloroethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Chloroform	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Chloromethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Dibromomethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Bromodichloromethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Dichlorodifluoromethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Hexachloro-1,3-Butadiene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Isopropylbenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
2-Butanone	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Methylene Chloride	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
2-Hexanone	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Naphthalene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
n-Butylbenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
n-Propylbenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
p-Isopropyltoluene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
sec-Butylbenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Styrene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
tert-Butylbenzene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12



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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
Tetrachloroethene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Trichloroethene	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Trichlorofluoromethane	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Vinyl Chloride	ND		mg/L	180801L042	099-12-878-754	08/01/18 17:12
Surr: 1,4-Bromofluorobenzene (68-120%)	96%			180801L042	099-12-878-754	08/01/18 17:12
Surr: Dibromofluoromethane (80-127%)	96%			180801L042	099-12-878-754	08/01/18 17:12
Surr: 1,2-Dichloroethane-d4 (80-128%)	97%			180801L042	099-12-878-754	08/01/18 17:12
Surr: Toluene-d8 (80-120%)	101%			180801L042	099-12-878-754	08/01/18 17:12
EPA 8260B Volatile Organics						
099-12-878-755						
Benzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Toluene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Ethylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
o-Xylene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
p/m-Xylene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Xylenes (total)	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,1,2-Tetrachloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,1-Trichloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,2,2-Tetrachloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,2-Trichloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1-Dichloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1-Dichloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1-Dichloropropene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2,3-Trichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2,3-Trichloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2,4-Trichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2,4-Trimethylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,3,5-Trimethylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
c-1,2-Dichloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dibromo-3-Chloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dibromoethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dichloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dichloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
t-1,2-Dichloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
c-1,3-Dichloropropene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,3-Dichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,3-Dichloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
t-1,3-Dichloropropene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,4-Dichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
2,2-Dichloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
2-Chlorotoluene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
4-Chlorotoluene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
4-Methyl-2-Pentanone	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Acetone	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromochloromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromoform	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromomethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Carbon Disulfide	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Carbon Tetrachloride	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Chlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Dibromochloromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Chloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Chloroform	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Chloromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Dibromomethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromodichloromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Dichlorodifluoromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Hexachloro-1,3-Butadiene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Isopropylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
2-Butanone	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Methylene Chloride	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
2-Hexanone	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Naphthalene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
n-Butylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
n-Propylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
p-Isopropyltoluene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
sec-Butylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Styrene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
tert-Butylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Tetrachloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Trichloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Trichlorofluoromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Vinyl Chloride	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Surr: 1,4-Bromofluorobenzene (68-120%)	100%			180802L036	099-12-878-755	08/02/18 11:20
Surr: Dibromofluoromethane (80-127%)	99%			180802L036	099-12-878-755	08/02/18 11:20
Surr: 1,2-Dichloroethane-d4 (80-128%)	102%			180802L036	099-12-878-755	08/02/18 11:20
Surr: Toluene-d8 (80-120%)	100%			180802L036	099-12-878-755	08/02/18 11:20

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

**QUALITY CONTROL
Matrix Spike**

Analyte	Orig. Val.	MS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
SM 4500-CL C Chloride										
18-07-1591-3										
Chloride	46.59	150.6		mg/L	100.0	104	80-120	I0724CLCS1	18-07-1591-3	07/24/18 18:00
EPA 6010B ICP Metals										
18-07-1591-1										
Arsenic	ND	0.5183		mg/L	0.5000	104	80-140	180730SA5	18-07-1591-1	08/03/18 15:36
Barium	0.05900	0.5690		mg/L	0.5000	102	87-123	180730SA5	18-07-1591-1	08/03/18 15:36
Cadmium	ND	0.4992		mg/L	0.5000	100	82-124	180730SA5	18-07-1591-1	08/03/18 15:36
Chromium	ND	0.5051		mg/L	0.5000	101	86-122	180730SA5	18-07-1591-1	08/03/18 15:36
Lead	ND	0.5154		mg/L	0.5000	103	84-120	180730SA5	18-07-1591-1	08/03/18 15:36
Selenium	ND	0.5244		mg/L	0.5000	105	79-127	180730SA5	18-07-1591-1	08/03/18 15:36
Silver	ND	0.02846	HX	mg/L	0.2500	11	86-128	180730SA5	18-07-1591-1	08/03/18 15:36
EPA 7470A Mercury										
18-07-1594-1										
Mercury	ND	0.008332		mg/L	0.01000	83	55-133	180802SA1	18-07-1594-1	08/02/18 14:41
EPA 8260B Volatile Organics										
18-07-1912-4										
Benzene	ND	0.01079		mg/L	0.01000	108	75-125	180801S009	18-07-1912-4	08/01/18 21:36
Toluene	ND	0.01090		mg/L	0.01000	109	75-125	180801S009	18-07-1912-4	08/01/18 21:36
Ethylbenzene	ND	0.01137		mg/L	0.01000	114	75-125	180801S009	18-07-1912-4	08/01/18 21:36
o-Xylene	ND	0.01112		mg/L	0.01000	111	75-127	180801S009	18-07-1912-4	08/01/18 21:36
p/m-Xylene	ND	0.02181		mg/L	0.02000	109	75-125	180801S009	18-07-1912-4	08/01/18 21:36
Methyl-t-Butyl Ether (MTBE)	ND	0.009409		mg/L	0.01000	94	71-131	180801S009	18-07-1912-4	08/01/18 21:36
1,1,1,2-Tetrachloroethane	ND	0.01100		mg/L	0.01000	110	75-127	180801S009	18-07-1912-4	08/01/18 21:36
1,1,1-Trichloroethane	ND	0.01109		mg/L	0.01000	111	72-132	180801S009	18-07-1912-4	08/01/18 21:36
1,1,2,2-Tetrachloroethane	ND	0.01053		mg/L	0.01000	105	75-132	180801S009	18-07-1912-4	08/01/18 21:36
1,1,2-Trichloroethane	ND	0.01077		mg/L	0.01000	108	75-125	180801S009	18-07-1912-4	08/01/18 21:36
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.009797		mg/L	0.01000	98	70-130	180801S009	18-07-1912-4	08/01/18 21:36
1,1-Dichloroethane	ND	0.009761		mg/L	0.01000	98	68-128	180801S009	18-07-1912-4	08/01/18 21:36
1,1-Dichloroethene	ND	0.01060		mg/L	0.01000	106	66-126	180801S009	18-07-1912-4	08/01/18 21:36
1,1-Dichloropropene	ND	0.01145		mg/L	0.01000	114	74-134	180801S009	18-07-1912-4	08/01/18 21:36
1,2,3-Trichlorobenzene	ND	0.01066		mg/L	0.01000	107	75-125	180801S009	18-07-1912-4	08/01/18 21:36
1,2,3-Trichloropropane	ND	0.01039		mg/L	0.01000	104	75-125	180801S009	18-07-1912-4	08/01/18 21:36
1,2,4-Trichlorobenzene	ND	0.01088		mg/L	0.01000	109	75-125	180801S009	18-07-1912-4	08/01/18 21:36
1,2,4-Trimethylbenzene	ND	0.01018		mg/L	0.01000	102	75-125	180801S009	18-07-1912-4	08/01/18 21:36
1,3,5-Trimethylbenzene	ND	0.01080		mg/L	0.01000	108	75-127	180801S009	18-07-1912-4	08/01/18 21:36
c-1,2-Dichloroethene	ND	0.01110		mg/L	0.01000	111	75-130	180801S009	18-07-1912-4	08/01/18 21:36
1,2-Dibromo-3-Chloropropane	ND	0.01018		mg/L	0.01000	102	75-127	180801S009	18-07-1912-4	08/01/18 21:36
1,2-Dibromoethane	ND	0.01086		mg/L	0.01000	109	75-126	180801S009	18-07-1912-4	08/01/18 21:36
1,2-Dichlorobenzene	ND	0.01065		mg/L	0.01000	106	75-125	180801S009	18-07-1912-4	08/01/18 21:36
1,2-Dichloroethane	ND	0.01045		mg/L	0.01000	104	75-127	180801S009	18-07-1912-4	08/01/18 21:36



Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

QUALITY CONTROL Matrix Spike

Analyte	Orig. Val.	MS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
1,2-Dichloropropane	ND	0.01071		mg/L	0.01000	107	75-125	180801S009	18-07-1912-4	08/01/18 21:36
t-1,2-Dichloroethene	ND	0.01139		mg/L	0.01000	114	73-133	180801S009	18-07-1912-4	08/01/18 21:36
c-1,3-Dichloropropene	ND	0.01110		mg/L	0.01000	111	75-128	180801S009	18-07-1912-4	08/01/18 21:36
1,3-Dichlorobenzene	ND	0.01100		mg/L	0.01000	110	75-126	180801S009	18-07-1912-4	08/01/18 21:36
1,3-Dichloropropane	ND	0.01081		mg/L	0.01000	108	75-125	180801S009	18-07-1912-4	08/01/18 21:36
t-1,3-Dichloropropene	ND	0.01149		mg/L	0.01000	115	75-125	180801S009	18-07-1912-4	08/01/18 21:36
1,4-Dichlorobenzene	ND	0.01058		mg/L	0.01000	106	75-125	180801S009	18-07-1912-4	08/01/18 21:36
2,2-Dichloropropane	ND	0.01210		mg/L	0.01000	121	52-160	180801S009	18-07-1912-4	08/01/18 21:36
2-Chlorotoluene	ND	0.01107		mg/L	0.01000	111	75-128	180801S009	18-07-1912-4	08/01/18 21:36
4-Chlorotoluene	ND	0.01069		mg/L	0.01000	107	75-125	180801S009	18-07-1912-4	08/01/18 21:36
4-Methyl-2-Pentanone	ND	0.009756		mg/L	0.01000	98	65-137	180801S009	18-07-1912-4	08/01/18 21:36
Acetone	ND	0.007230		mg/L	0.01000	72	20-180	180801S009	18-07-1912-4	08/01/18 21:36
Bromobenzene	ND	0.01068		mg/L	0.01000	107	75-125	180801S009	18-07-1912-4	08/01/18 21:36
Bromochloromethane	ND	0.01049		mg/L	0.01000	105	75-128	180801S009	18-07-1912-4	08/01/18 21:36
Bromoform	ND	0.01078		mg/L	0.01000	108	71-137	180801S009	18-07-1912-4	08/01/18 21:36
Bromomethane	ND	0.01270		mg/L	0.01000	127	37-181	180801S009	18-07-1912-4	08/01/18 21:36
Carbon Disulfide	ND	0.01062		mg/L	0.01000	106	58-136	180801S009	18-07-1912-4	08/01/18 21:36
Carbon Tetrachloride	ND	0.01151		mg/L	0.01000	115	69-135	180801S009	18-07-1912-4	08/01/18 21:36
Chlorobenzene	ND	0.01074		mg/L	0.01000	107	75-125	180801S009	18-07-1912-4	08/01/18 21:36
Dibromochloromethane	ND	0.01106		mg/L	0.01000	111	75-125	180801S009	18-07-1912-4	08/01/18 21:36
Chloroethane	ND	0.01036		mg/L	0.01000	104	20-180	180801S009	18-07-1912-4	08/01/18 21:36
Chloroform	ND	0.01111		mg/L	0.01000	111	75-128	180801S009	18-07-1912-4	08/01/18 21:36
Chloromethane	ND	0.01068		mg/L	0.01000	107	41-149	180801S009	18-07-1912-4	08/01/18 21:36
Dibromomethane	ND	0.01065		mg/L	0.01000	106	75-129	180801S009	18-07-1912-4	08/01/18 21:36
Bromodichloromethane	ND	0.01090		mg/L	0.01000	109	75-125	180801S009	18-07-1912-4	08/01/18 21:36
Dichlorodifluoromethane	ND	0.007874		mg/L	0.01000	79	28-172	180801S009	18-07-1912-4	08/01/18 21:36
Hexachloro-1,3-Butadiene	ND	0.01072		mg/L	0.01000	107	75-129	180801S009	18-07-1912-4	08/01/18 21:36
Isopropylbenzene	ND	0.01142		mg/L	0.01000	114	75-130	180801S009	18-07-1912-4	08/01/18 21:36
2-Butanone	ND	0.009591		mg/L	0.01000	96	20-180	180801S009	18-07-1912-4	08/01/18 21:36
Methylene Chloride	ND	0.01171		mg/L	0.01000	117	74-128	180801S009	18-07-1912-4	08/01/18 21:36
2-Hexanone	ND	0.01025		mg/L	0.01000	102	74-122	180801S009	18-07-1912-4	08/01/18 21:36
Naphthalene	ND	0.009078		mg/L	0.01000	91	75-136	180801S009	18-07-1912-4	08/01/18 21:36
n-Butylbenzene	ND	0.01144		mg/L	0.01000	114	75-125	180801S009	18-07-1912-4	08/01/18 21:36
n-Propylbenzene	ND	0.01139		mg/L	0.01000	114	75-129	180801S009	18-07-1912-4	08/01/18 21:36
p-Isopropyltoluene	ND	0.01101		mg/L	0.01000	110	75-125	180801S009	18-07-1912-4	08/01/18 21:36
sec-Butylbenzene	ND	0.01141		mg/L	0.01000	114	75-129	180801S009	18-07-1912-4	08/01/18 21:36
Styrene	ND	0.008773		mg/L	0.01000	88	28-166	180801S009	18-07-1912-4	08/01/18 21:36
tert-Butylbenzene	ND	0.01145		mg/L	0.01000	114	75-129	180801S009	18-07-1912-4	08/01/18 21:36
Tetrachloroethene	ND	0.009062		mg/L	0.01000	91	58-124	180801S009	18-07-1912-4	08/01/18 21:36
Trichloroethene	ND	0.01101		mg/L	0.01000	110	75-125	180801S009	18-07-1912-4	08/01/18 21:36
Trichlorofluoromethane	ND	0.009904		mg/L	0.01000	99	68-134	180801S009	18-07-1912-4	08/01/18 21:36
Vinyl Chloride	ND	0.01014		mg/L	0.01000	101	52-142	180801S009	18-07-1912-4	08/01/18 21:36

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The difference is service

Client: Cardno	Work Order: 18-07-1592
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

QUALITY CONTROL
Matrix Spike

Analyte	Orig. Val.	MS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
EPA 8260B Volatile Organics										
18-07-1647-4										
Benzene	0.0005996	0.01092		mg/L	0.01000	103	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Toluene	ND	0.01063		mg/L	0.01000	106	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Ethylbenzene	0.0005612	0.01109		mg/L	0.01000	105	75-125	180802S009	18-07-1647-4	08/02/18 14:33
o-Xylene	ND	0.01082		mg/L	0.01000	108	75-127	180802S009	18-07-1647-4	08/02/18 14:33
p/m-Xylene	0.001045	0.02241		mg/L	0.02000	107	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Methyl-t-Butyl Ether (MTBE)	ND	0.008748		mg/L	0.01000	87	71-131	180802S009	18-07-1647-4	08/02/18 14:33
1,1-Dichloroethene	ND	0.01089		mg/L	0.01000	109	66-126	180802S009	18-07-1647-4	08/02/18 14:33
1,2-Dibromoethane	ND	0.01020		mg/L	0.01000	102	75-126	180802S009	18-07-1647-4	08/02/18 14:33
1,2-Dichlorobenzene	ND	0.01045		mg/L	0.01000	105	75-125	180802S009	18-07-1647-4	08/02/18 14:33
1,2-Dichloroethane	ND	0.01051		mg/L	0.01000	105	75-127	180802S009	18-07-1647-4	08/02/18 14:33
Carbon Tetrachloride	ND	0.01014		mg/L	0.01000	101	69-135	180802S009	18-07-1647-4	08/02/18 14:33
Chlorobenzene	ND	0.01025		mg/L	0.01000	102	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Trichloroethene	ND	0.01011		mg/L	0.01000	101	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Vinyl Chloride	ND	0.01157		mg/L	0.01000	116	52-142	180802S009	18-07-1647-4	08/02/18 14:33

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

QUALITY CONTROL Matrix Spike Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
SM 4500-CL C Chloride												
18-07-1591-3												
Chloride	46.59	150.1		mg/L	100.0	103	80-120	0	0-25	I0724CLCS1	18-07-1591-3	07/24/18 18:00
EPA 6010B ICP Metals												
18-07-1591-1												
Arsenic	ND	0.5016		mg/L	0.5000	100	80-140	3	0-11	180730SA5	18-07-1591-1	08/03/18 15:37
Barium	0.05900	0.5666		mg/L	0.5000	102	87-123	0	0-6	180730SA5	18-07-1591-1	08/03/18 15:37
Cadmium	ND	0.4994		mg/L	0.5000	100	82-124	0	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
Chromium	ND	0.5010		mg/L	0.5000	100	86-122	1	0-8	180730SA5	18-07-1591-1	08/03/18 15:37
Lead	ND	0.5147		mg/L	0.5000	103	84-120	0	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
Selenium	ND	0.5160		mg/L	0.5000	103	79-127	2	0-9	180730SA5	18-07-1591-1	08/03/18 15:37
Silver	ND	0.06513	HX,BA	mg/L	0.2500	26	86-128	78	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
EPA 7470A Mercury												
18-07-1594-1												
Mercury	ND	0.007775		mg/L	0.01000	78	55-133	7	0-20	180802SA1	18-07-1594-1	08/02/18 14:48
EPA 8260B Volatile Organics												
18-07-1912-4												
Benzene	ND	0.01016		mg/L	0.01000	102	75-125	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Toluene	ND	0.01049		mg/L	0.01000	105	75-125	4	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Ethylbenzene	ND	0.01072		mg/L	0.01000	107	75-125	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
o-Xylene	ND	0.01060		mg/L	0.01000	106	75-127	5	0-20	180801S009	18-07-1912-4	08/01/18 22:07
p/m-Xylene	ND	0.02051		mg/L	0.02000	103	75-125	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Methyl-t-Butyl Ether (MTBE)	ND	0.008744		mg/L	0.01000	87	71-131	7	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,1,1,2-Tetrachloroethane	ND	0.01006		mg/L	0.01000	101	75-127	9	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,1,1-Trichloroethane	ND	0.01009		mg/L	0.01000	101	72-132	9	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,1,2,2-Tetrachloroethane	ND	0.009902		mg/L	0.01000	99	75-132	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,1,2-Trichloroethane	ND	0.009842		mg/L	0.01000	98	75-125	9	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.008720		mg/L	0.01000	87	70-130	12	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,1-Dichloroethane	ND	0.008982		mg/L	0.01000	90	68-128	8	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,1-Dichloroethene	ND	0.009817		mg/L	0.01000	98	66-126	8	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,1-Dichloropropene	ND	0.01031		mg/L	0.01000	103	74-134	10	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,2,3-Trichlorobenzene	ND	0.01030		mg/L	0.01000	103	75-125	3	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,2,3-Trichloropropane	ND	0.009976		mg/L	0.01000	100	75-125	4	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,2,4-Trichlorobenzene	ND	0.01051		mg/L	0.01000	105	75-125	3	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,2,4-Trimethylbenzene	ND	0.008936		mg/L	0.01000	89	75-125	13	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,3,5-Trimethylbenzene	ND	0.01014		mg/L	0.01000	101	75-127	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
c-1,2-Dichloroethene	ND	0.01024		mg/L	0.01000	102	75-130	8	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,2-Dibromo-3-Chloropropane	ND	0.01005		mg/L	0.01000	100	75-127	1	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,2-Dibromoethane	ND	0.009946		mg/L	0.01000	99	75-126	9	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,2-Dichlorobenzene	ND	0.01046		mg/L	0.01000	105	75-125	2	0-20	180801S009	18-07-1912-4	08/01/18 22:07



Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

QUALITY CONTROL Matrix Spike Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
1,2-Dichloroethane	ND	0.009834		mg/L	0.01000	98	75-127	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,2-Dichloropropane	ND	0.01001		mg/L	0.01000	100	75-125	7	0-20	180801S009	18-07-1912-4	08/01/18 22:07
t-1,2-Dichloroethene	ND	0.01025		mg/L	0.01000	102	73-133	11	0-20	180801S009	18-07-1912-4	08/01/18 22:07
c-1,3-Dichloropropene	ND	0.01045		mg/L	0.01000	104	75-128	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,3-Dichlorobenzene	ND	0.01050		mg/L	0.01000	105	75-126	5	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,3-Dichloropropane	ND	0.009944		mg/L	0.01000	99	75-125	8	0-20	180801S009	18-07-1912-4	08/01/18 22:07
t-1,3-Dichloropropene	ND	0.01052		mg/L	0.01000	105	75-125	9	0-20	180801S009	18-07-1912-4	08/01/18 22:07
1,4-Dichlorobenzene	ND	0.01015		mg/L	0.01000	102	75-125	4	0-20	180801S009	18-07-1912-4	08/01/18 22:07
2,2-Dichloropropane	ND	0.01074		mg/L	0.01000	107	52-160	12	0-20	180801S009	18-07-1912-4	08/01/18 22:07
2-Chlorotoluene	ND	0.01060		mg/L	0.01000	106	75-128	4	0-20	180801S009	18-07-1912-4	08/01/18 22:07
4-Chlorotoluene	ND	0.01014		mg/L	0.01000	101	75-125	5	0-20	180801S009	18-07-1912-4	08/01/18 22:07
4-Methyl-2-Pentanone	ND	0.01001		mg/L	0.01000	100	65-137	3	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Acetone	ND	0.008017		mg/L	0.01000	80	20-180	10	0-52	180801S009	18-07-1912-4	08/01/18 22:07
Bromobenzene	ND	0.01033		mg/L	0.01000	103	75-125	3	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Bromochloromethane	ND	0.009854		mg/L	0.01000	99	75-128	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Bromoform	ND	0.01003		mg/L	0.01000	100	71-137	7	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Bromomethane	ND	0.01221		mg/L	0.01000	122	37-181	4	0-22	180801S009	18-07-1912-4	08/01/18 22:07
Carbon Disulfide	ND	0.009998		mg/L	0.01000	100	58-136	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Carbon Tetrachloride	ND	0.01028		mg/L	0.01000	103	69-135	11	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Chlorobenzene	ND	0.01002		mg/L	0.01000	100	75-125	7	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Dibromochloromethane	ND	0.01008		mg/L	0.01000	101	75-125	9	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Chloroethane	ND	0.01019		mg/L	0.01000	102	20-180	2	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Chloroform	ND	0.01012		mg/L	0.01000	101	75-128	9	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Chloromethane	ND	0.01089		mg/L	0.01000	109	41-149	2	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Dibromomethane	ND	0.01005		mg/L	0.01000	101	75-129	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Bromodichloromethane	ND	0.01029		mg/L	0.01000	103	75-125	6	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Dichlorodifluoromethane	ND	0.007227		mg/L	0.01000	72	28-172	9	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Hexachloro-1,3-Butadiene	ND	0.01056		mg/L	0.01000	106	75-129	1	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Isopropylbenzene	ND	0.01092		mg/L	0.01000	109	75-130	4	0-20	180801S009	18-07-1912-4	08/01/18 22:07
2-Butanone	ND	0.009630		mg/L	0.01000	96	20-180	0	0-40	180801S009	18-07-1912-4	08/01/18 22:07
Methylene Chloride	ND	0.01083		mg/L	0.01000	108	74-128	8	0-20	180801S009	18-07-1912-4	08/01/18 22:07
2-Hexanone	ND	0.01045		mg/L	0.01000	104	74-122	2	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Naphthalene	ND	0.008974		mg/L	0.01000	90	75-136	1	0-20	180801S009	18-07-1912-4	08/01/18 22:07
n-Butylbenzene	ND	0.01112		mg/L	0.01000	111	75-125	3	0-20	180801S009	18-07-1912-4	08/01/18 22:07
n-Propylbenzene	ND	0.01094		mg/L	0.01000	109	75-129	4	0-20	180801S009	18-07-1912-4	08/01/18 22:07
p-Isopropyltoluene	ND	0.01047		mg/L	0.01000	105	75-125	5	0-20	180801S009	18-07-1912-4	08/01/18 22:07
sec-Butylbenzene	ND	0.01087		mg/L	0.01000	109	75-129	5	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Styrene	ND	0.007119		mg/L	0.01000	71	28-166	21	0-30	180801S009	18-07-1912-4	08/01/18 22:07
tert-Butylbenzene	ND	0.01105		mg/L	0.01000	111	75-129	3	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Tetrachloroethene	ND	0.008430		mg/L	0.01000	84	58-124	7	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Trichloroethene	ND	0.01028		mg/L	0.01000	103	75-125	7	0-20	180801S009	18-07-1912-4	08/01/18 22:07
Trichlorofluoromethane	ND	0.009517		mg/L	0.01000	95	68-134	4	0-20	180801S009	18-07-1912-4	08/01/18 22:07

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

QUALITY CONTROL Matrix Spike Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
Vinyl Chloride	ND	0.01020		mg/L	0.01000	102	52-142	1	0-20	180801S009	18-07-1912-4	08/01/18 22:07
EPA 8260B Volatile Organics												
18-07-1647-4												
Benzene	0.000599 6	0.01074		mg/L	0.01000	101	75-125	2	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Toluene	ND	0.01045		mg/L	0.01000	105	75-125	2	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Ethylbenzene	0.000561 2	0.01102		mg/L	0.01000	105	75-125	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
o-Xylene	ND	0.01068		mg/L	0.01000	107	75-127	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
p/m-Xylene	0.001045	0.02220		mg/L	0.02000	106	75-125	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Methyl-t-Butyl Ether (MTBE)	ND	0.008666		mg/L	0.01000	87	71-131	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
1,1-Dichloroethene	ND	0.01062		mg/L	0.01000	106	66-126	3	0-20	180802S009	18-07-1647-4	08/02/18 15:03
1,2-Dibromoethane	ND	0.01017		mg/L	0.01000	102	75-126	0	0-20	180802S009	18-07-1647-4	08/02/18 15:03
1,2-Dichlorobenzene	ND	0.01037		mg/L	0.01000	104	75-125	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
1,2-Dichloroethane	ND	0.01035		mg/L	0.01000	103	75-127	2	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Carbon Tetrachloride	ND	0.01008		mg/L	0.01000	101	69-135	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Chlorobenzene	ND	0.01021		mg/L	0.01000	102	75-125	0	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Trichloroethene	ND	0.01022		mg/L	0.01000	102	75-125	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Vinyl Chloride	ND	0.01140		mg/L	0.01000	114	52-142	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

QUALITY CONTROL
Post Digestion Spike

Analyte	Orig. Val.	PDS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
EPA 6010B ICP Metals										
18-07-1591-1										
Arsenic	ND	0.4856		mg/L	0.5000	97	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Barium	0.05900	0.5799		mg/L	0.5000	104	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Cadmium	ND	0.5102		mg/L	0.5000	102	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Chromium	ND	0.5095		mg/L	0.5000	102	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Lead	ND	0.5332		mg/L	0.5000	107	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Selenium	ND	0.5419		mg/L	0.5000	108	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Silver	ND	0.2234		mg/L	0.2500	89	75-125	180730SA5	18-07-1591-1	08/03/18 15:37

Qual: Qualifiers

Client:	Cardno	Work Order:	18-07-1592
	20505 Crescent Bay Drive	Project Name:	ExxonMobil Gladiola Station
	Lake Forest, CA 92630-8825	Date Received:	07/21/18

QUALITY CONTROL
Post Digestion Spike Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
EPA 6010B ICP Metals												
18-07-1591-1												
Arsenic	ND	0.4871		mg/L	0.5000	97	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Barium	0.05900	0.5823		mg/L	0.5000	105	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Cadmium	ND	0.5035		mg/L	0.5000	101	75-125	1	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Chromium	ND	0.5110		mg/L	0.5000	102	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Lead	ND	0.5142		mg/L	0.5000	103	75-125	4	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Selenium	ND	0.4838		mg/L	0.5000	97	75-125	11	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Silver	ND	0.2274		mg/L	0.2500	91	75-125	2	0-20	180730SA5	18-07-1591-1	08/03/18 15:38

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Qual - Qualifiers RPD: Relative Percent Difference



Calscience

The difference is service

Client: Cardno	Work Order: 18-07-1592
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

**QUALITY CONTROL
Sample Duplicate**

Analyte	Orig. Val.	Duplicate	Qual.	Units	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
SM 2320B Alkalinity									
18-07-1456-3									
Alkalinity, Total (as CaCO ₃)	52.80	52.74		mg/L	0	0-25	I0723ALKD2	18-07-1456-3	07/24/18 02:19
SM 2320B Alkalinity									
18-07-1599-3									
Alkalinity, Total (as CaCO ₃)	1750	1728		mg/L	1	0-25	I0724ALKD1	18-07-1599-3	07/24/18 20:30
SM 2540 C Total Dissolved Solids									
18-07-1456-3									
Solids, Total Dissolved	3370	3440		mg/L	2	0-20	I0724TDSD6	18-07-1456-3	07/24/18 18:00


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RPD: Relative Percent Difference.



Calscience

The difference is service

Client: Cardno	Work Order: 18-07-1592
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA
Laboratory Control Sample

Analyte	Known Val.	Analyzed	Qual.	Units	% Rec.	Target Range	Batch	Analysis Date/Time
EPA 300.0 Anions								
099-12-906-8657								
Sulfate	50.00	48.37		mg/L	97	90-110	180724L02	07/24/18 20:34
SM 2320B Alkalinity								
099-17-086-21								
Alkalinity, Total (as CaCO3)	100.0	110.3		mg/L	110	80-120	I0723ALKB2	07/24/18 02:19
SM 2320B Alkalinity								
099-17-086-18								
Alkalinity, Total (as CaCO3)	100.0	110.3		mg/L	110	80-120	I0723ALKB2	07/24/18 02:19
SM 2320B Alkalinity								
099-17-086-14								
Alkalinity, Total (as CaCO3)	100.0	116.0		mg/L	116	80-120	I0724ALKB1	07/24/18 20:30
SM 2540 C Total Dissolved Solids								
099-12-180-6309								
Solids, Total Dissolved	100.0	95.00		mg/L	95	80-120	I0724TDSL3	07/24/18 18:00
SM 4500-CL C Chloride								
099-05-057-2222								
Chloride	100.0	100.6		mg/L	101	80-120	I0724CLCL1	07/24/18 18:00
EPA 6010B ICP Metals								
097-01-003-16987								
Arsenic	0.5000	0.4415		mg/L	88	80-120	180730LA5	08/03/18 14:55
Barium	0.5000	0.5081		mg/L	102	80-120	180730LA5	08/03/18 14:55
Cadmium	0.5000	0.5186		mg/L	104	80-120	180730LA5	08/03/18 14:55
Chromium	0.5000	0.4881		mg/L	98	80-120	180730LA5	08/03/18 14:55
Lead	0.5000	0.5019		mg/L	100	80-120	180730LA5	08/03/18 14:55
Selenium	0.5000	0.4333		mg/L	87	80-120	180730LA5	08/03/18 14:55
Silver	0.2500	0.2235		mg/L	89	80-120	180730LA5	08/03/18 14:55
EPA 7470A Mercury								
099-12-457-382								
Mercury	0.01000	0.008974		mg/L	90	80-120	180802LA1M	08/02/18 14:37
EPA 8270C SIM PAHs								
099-06-008-1064								
Naphthalene	0.002000	0.001772		mg/L	89	21-133	180725L01	07/26/18 15:21
2-Methylnaphthalene	0.002000	0.001834		mg/L	92	21-140	180725L01	07/26/18 15:21
1-Methylnaphthalene	0.002000	0.001825		mg/L	91	20-140	180725L01	07/26/18 15:21
Acenaphthylene	0.002000	0.001684		mg/L	84	33-145	180725L01	07/26/18 15:21
Acenaphthene	0.002000	0.001755		mg/L	88	55-121	180725L01	07/26/18 15:21
Fluorene	0.002000	0.001827		mg/L	91	59-121	180725L01	07/26/18 15:21
Phenanthrene	0.002000	0.001956		mg/L	98	54-120	180725L01	07/26/18 15:21



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The difference is service

Client: Cardno	Work Order: 18-07-1592
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA

Laboratory Control Sample

Analyte	Known Val.	Analyzed	Qual.	Units	% Rec.	Target Range	Batch	Analysis Date/Time
Anthracene	0.002000	0.001907		mg/L	95	27-133	180725L01	07/26/18 15:21
Fluoranthene	0.002000	0.001974		mg/L	99	26-137	180725L01	07/26/18 15:21
Pyrene	0.002000	0.001940		mg/L	97	45-129	180725L01	07/26/18 15:21
Benzo (a) Anthracene	0.002000	0.001990		mg/L	100	33-143	180725L01	07/26/18 15:21
Chrysene	0.002000	0.001964		mg/L	98	17-168	180725L01	07/26/18 15:21
Benzo (k) Fluoranthene	0.002000	0.001965		mg/L	98	24-159	180725L01	07/26/18 15:21
Benzo (b) Fluoranthene	0.002000	0.002010		mg/L	100	24-159	180725L01	07/26/18 15:21
Benzo (a) Pyrene	0.002000	0.002048		mg/L	102	17-163	180725L01	07/26/18 15:21
Indeno (1,2,3-c,d) Pyrene	0.002000	0.001966		mg/L	98	25-175	180725L01	07/26/18 15:21
Dibenz (a,h) Anthracene	0.002000	0.001865		mg/L	93	25-175	180725L01	07/26/18 15:21
Benzo (g,h,i) Perylene	0.002000	0.002193		mg/L	110	25-157	180725L01	07/26/18 15:21

Total number of LCS compounds: 18
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

EPA 8260B Volatile Organics

099-12-878-754

Benzene	0.01000	0.009745		mg/L	97	80-120	180801L042	08/01/18 15:49
Toluene	0.01000	0.009920		mg/L	99	80-120	180801L042	08/01/18 15:49
Ethylbenzene	0.01000	0.01028		mg/L	103	80-120	180801L042	08/01/18 15:49
o-Xylene	0.01000	0.01034		mg/L	103	80-120	180801L042	08/01/18 15:49
p/m-Xylene	0.02000	0.02007		mg/L	100	80-120	180801L042	08/01/18 15:49
Methyl-t-Butyl Ether (MTBE)	0.01000	0.008481		mg/L	85	75-123	180801L042	08/01/18 15:49
1,1-Dichloroethene	0.01000	0.008728		mg/L	87	77-120	180801L042	08/01/18 15:49
1,2-Dibromoethane	0.01000	0.01003		mg/L	100	80-120	180801L042	08/01/18 15:49
1,2-Dichlorobenzene	0.01000	0.01023		mg/L	102	80-120	180801L042	08/01/18 15:49
1,2-Dichloroethane	0.01000	0.009412		mg/L	94	80-122	180801L042	08/01/18 15:49
Carbon Tetrachloride	0.01000	0.009322		mg/L	93	80-129	180801L042	08/01/18 15:49
Chlorobenzene	0.01000	0.009908		mg/L	99	80-120	180801L042	08/01/18 15:49
Trichloroethene	0.01000	0.009583		mg/L	96	80-120	180801L042	08/01/18 15:49
Vinyl Chloride	0.01000	0.008906		mg/L	89	63-135	180801L042	08/01/18 15:49

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

EPA 8260B Volatile Organics

099-12-878-755

Benzene	0.01000	0.01075		mg/L	108	80-120	180802L036	08/02/18 09:33
Toluene	0.01000	0.01080		mg/L	108	80-120	180802L036	08/02/18 09:33
Ethylbenzene	0.01000	0.01084		mg/L	108	80-120	180802L036	08/02/18 09:33

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA
Laboratory Control Sample

Analyte	Known Val.	Analyzed	Qual.	Units	% Rec.	Target Range	Batch	Analysis Date/Time
o-Xylene	0.01000	0.01075		mg/L	107	80-120	180802L036	08/02/18 09:33
p/m-Xylene	0.02000	0.02196		mg/L	110	80-120	180802L036	08/02/18 09:33
Methyl-t-Butyl Ether (MTBE)	0.01000	0.008777		mg/L	88	75-123	180802L036	08/02/18 09:33
1,1-Dichloroethene	0.01000	0.01081		mg/L	108	77-120	180802L036	08/02/18 09:33
1,2-Dibromoethane	0.01000	0.01018		mg/L	102	80-120	180802L036	08/02/18 09:33
1,2-Dichlorobenzene	0.01000	0.01072		mg/L	107	80-120	180802L036	08/02/18 09:33
1,2-Dichloroethane	0.01000	0.01056		mg/L	106	80-122	180802L036	08/02/18 09:33
Carbon Tetrachloride	0.01000	0.01043		mg/L	104	80-129	180802L036	08/02/18 09:33
Chlorobenzene	0.01000	0.01063		mg/L	106	80-120	180802L036	08/02/18 09:33
Trichloroethene	0.01000	0.01069		mg/L	107	80-120	180802L036	08/02/18 09:33
Vinyl Chloride	0.01000	0.01076		mg/L	108	63-135	180802L036	08/02/18 09:33

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA Laboratory Control Sample Duplicate

Analyte	LCS Val.	Duplicate	Qual.	Units	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
EPA 300.0 Anions											
099-12-906-8657											
Sulfate	50.00	47.26		mg/L	95	90-110	2	0-15	180724L02	099-12-906-8657	07/24/18 20:52
SM 2320B Alkalinity											
099-17-086-21											
Alkalinity, Total (as CaCO ₃)	100.0	106.5		mg/L	106	80-120	4	0-20	I0723ALKB2	099-17-086-21	07/24/18 02:19
SM 2320B Alkalinity											
099-17-086-18											
Alkalinity, Total (as CaCO ₃)	100.0	106.5		mg/L	106	80-120	4	0-20	I0723ALKB2	099-17-086-18	07/24/18 02:19
SM 2320B Alkalinity											
099-17-086-14											
Alkalinity, Total (as CaCO ₃)	100.0	96.17		mg/L	96	80-120	19	0-20	I0724ALKB1	099-17-086-14	07/24/18 20:30
SM 2540 C Total Dissolved Solids											
099-12-180-6309											
Solids, Total Dissolved	100.0	100.0		mg/L	100	80-120	5	0-20	I0724TDSL3	099-12-180-6309	07/24/18 18:00
SM 4500-CL C Chloride											
099-05-057-2222											
Chloride	100.0	100.1		mg/L	100	80-120	0	0-20	I0724CLCL1	099-05-057-2222	07/24/18 18:00
EPA 8270C SIM PAHs											
099-06-008-1064											
Naphthalene	0.00200 0	0.001763		mg/L	88	21-133	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
2-Methylnaphthalene	0.00200 0	0.001816		mg/L	91	21-140	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
1-Methylnaphthalene	0.00200 0	0.001826		mg/L	91	20-140	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Acenaphthylene	0.00200 0	0.001727		mg/L	86	33-145	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Acenaphthene	0.00200 0	0.001824		mg/L	91	55-121	4	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Fluorene	0.00200 0	0.001932		mg/L	97	59-121	6	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Phenanthrene	0.00200 0	0.001987		mg/L	99	54-120	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Anthracene	0.00200 0	0.001954		mg/L	98	27-133	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Fluoranthene	0.00200 0	0.001987		mg/L	99	26-137	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Pyrene	0.00200 0	0.001947		mg/L	97	45-129	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (a) Anthracene	0.00200 0	0.002008		mg/L	100	33-143	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41

Qual - Qualifiers RPD: Relative Percent Difference



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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1592
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA Laboratory Control Sample Duplicate

Analyte	LCS Val.	Duplicate	Qual.	Units	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
Chrysene	0.00200 0	0.001995		mg/L	100	17-168	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (k) Fluoranthene	0.00200 0	0.001992		mg/L	100	24-159	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (b) Fluoranthene	0.00200 0	0.002051		mg/L	103	24-159	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (a) Pyrene	0.00200 0	0.002106		mg/L	105	17-163	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Indeno (1,2,3-c,d) Pyrene	0.00200 0	0.002028		mg/L	101	25-175	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Dibenz (a,h) Anthracene	0.00200 0	0.002054		mg/L	103	25-175	10	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (g,h,i) Perylene	0.00200 0	0.002253		mg/L	113	25-157	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41

Total number of LCS compounds: 18

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

EPA 8260B Volatile Organics**099-12-878-755**

Benzene	0.01000	0.01030		mg/L	103	80-120	4	0-22	180802L036	099-12-878-755	08/02/18 10:02
Toluene	0.01000	0.01037		mg/L	104	80-120	4	0-28	180802L036	099-12-878-755	08/02/18 10:02
Ethylbenzene	0.01000	0.01038		mg/L	104	80-120	4	0-25	180802L036	099-12-878-755	08/02/18 10:02
o-Xylene	0.01000	0.01034		mg/L	103	80-120	4	0-30	180802L036	099-12-878-755	08/02/18 10:02
p/m-Xylene	0.02000	0.02090		mg/L	105	80-120	5	0-30	180802L036	099-12-878-755	08/02/18 10:02
Methyl-t-Butyl Ether (MTBE)	0.01000	0.008913		mg/L	89	75-123	2	0-27	180802L036	099-12-878-755	08/02/18 10:02
1,1-Dichloroethene	0.01000	0.01042		mg/L	104	77-120	4	0-26	180802L036	099-12-878-755	08/02/18 10:02
1,2-Dibromoethane	0.01000	0.01024		mg/L	102	80-120	1	0-32	180802L036	099-12-878-755	08/02/18 10:02
1,2-Dichlorobenzene	0.01000	0.01063		mg/L	106	80-120	1	0-30	180802L036	099-12-878-755	08/02/18 10:02
1,2-Dichloroethane	0.01000	0.01058		mg/L	106	80-122	0	0-23	180802L036	099-12-878-755	08/02/18 10:02
Carbon Tetrachloride	0.01000	0.009910		mg/L	99	80-129	5	0-36	180802L036	099-12-878-755	08/02/18 10:02
Chlorobenzene	0.01000	0.01025		mg/L	103	80-120	4	0-29	180802L036	099-12-878-755	08/02/18 10:02
Trichloroethene	0.01000	0.01022		mg/L	102	80-120	5	0-25	180802L036	099-12-878-755	08/02/18 10:02
Vinyl Chloride	0.01000	0.01009		mg/L	101	63-135	7	0-30	180802L036	099-12-878-755	08/02/18 10:02

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Qual - Qualifiers RPD: Relative Percent Difference



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The difference is service

Work Order: 18-07-1592

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Sample Analysis Summary Report

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 300.0	N/A	27	IC 7	1
EPA 6010B	EPA 3010A Total	1080	ICP 8300	1
EPA 7470A	EPA 7470A Total	868	Mercury 07	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B	EPA 5030C	1162	GC/MS UU	2
EPA 8270C SIM PAHs	EPA 3510C	928	GC/MS EEE	1
SM 2320B	N/A	834	PCT 1	1
SM 2540 C	N/A	1136	N/A	1
SM 4500-CI C	N/A	1086	BUR02	1


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Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841



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Work Order: 18-07-1592

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Glossary of Terms and Qualifiers

Qualifiers	Definition
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stdns.
HO	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS was in control.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
SG	A silica gel cleanup procedure was performed.
SN	See applicable analysis comment.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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CHAIN OF CUSTODY RECORD

DATE:

07/20/18

PAGE:

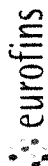
1 OF 2

Site Name	
Provide MRN for retail or AFE for major projects	
Retail Project (MRN)	
Major Project (AFE)	
Project Name	ExxonMobil Gladiola Station

7440 LINCOLN WAY

GARDEN GROVE, CA 92841-1432

TEL: (714) 895-5494 . FAX: (714) 894-7501



ExxonMobil Engr:

Maria Madden

LABORATORY CLIENT: Cardno		GLOBAL ID # COELT LOG CODE:		EMES Sub Agreement #A2604415											
ADDRESS: 25371 Comemrcentre Drive, Suite 250		PROJECT CONTACT David Purdy		LAB USE ONLY 18-07-1592											
CITY: Lake Forest, CA 92630		SAMPLER(S) Stephen Hunter, Vincent Nguyen		COOLER RECEIPT Temp = _____ °C											
TEL: 949-457-8941		FAX: 949-457-8956		TURNAROUND TIME ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 10 DAYS											
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL _____		SPECIAL INSTRUCTIONS: New Mexico Site		Report J values.											
LAB USE ONLY	SAMPLE ID	Field Point Name	SAMPLING		NO OF CONT.	EPA 8260B LL VOCs only (TC# 6401)	EPA 8270C SIM PAHs (TC# 4741)	EPA 6010B As, Ba, Cd, Cr, Pb, Se and Ag only (TC# 2516)	EPA 7470A Mercury (TC# 5096)	EPA 300.0 Sulfate (TC# 5431)	SM 2320B Alkalinity (TC# 6512) and SM 4500-Cl C Chloride (TC# 755)	SM 2540C Total Dissolved Solids (TC# 4942)	CONTAINER TYPE		
			DATE	TIME											
1	W-39-B1/MW27	B1/MW27	07/17/18	1500	11	X	X	X	X	X	X	X	5 vials with HCL, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic		
2	W-41-B5/MW31	B5/MW31	07/19/18	1720	11	X	X	X	X	X	X	X	5 vials with HCL, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic		
3	W-39-B3/MW29	B3/MW29	07/19/18	1130	11	X	X	X	X	X	X	X	5 vials with HCL, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic		
4	TRIP BLANK	QCTB	07/19/18	1411	11	X	X	X	X	X	X	X	5 vials with HCL, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic		
5					11	X	X	X	X	X	X	X	5 vials with HCL, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic		
6					11	X	X	X	X	X	X	X	5 vials with HCL, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic		
7					11	X	X	X	X	X	X	X	5 vials with HCL, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic		
8					11	X	X	X	X	X	X	X	5 vials with HCL, 2-1L Amber Glass, 250mL Plastic with HNO3, 125mL Plastic, 250mL Plastic, 1L Plastic		
Relinquished by (Signature) <i>Steph Hunter</i>														Received by (Signature) <i>FedEx</i>	
Relinquished by (Signature)														Received by (Signature)	
Relinquished by (Signature)														Received by (Signature)	
Date & Time: 07/20/18; 1700														Date & Time: 7/21/18 1130	

COC/Gladiola Station-NM Site COC-13 samples

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1592

DO NOT WRITE ON THIS LABEL

Recipient's Name Please print

ORIGIN ID: H0BA (949) 457-8950

CARDINO
20505 CRESCENT BAY DR
LAKE FOREST, CA 92630
UNITED STATES US

SHIP DATE:
ACTWT: 1.48
CAD: 00699
DIMS: 17x

BILL THIR

RT 138
ST 25
3 12:00
B 7970 07.21

TO
St
City

EUROFINS CALSCIENCE INC
7440 LINCOLN WAY
GARDEN GROVE CA 92841

(714) 892-5626 REF: DEPT:

© 2011 F

FedEx
Express

4 of 5

MPS# 7727 7903 7970
0263

Mstr# 7727 7903 7947

0201

SATURDAY 12:00
PRIORITY OVERNIGHT

XO APVA

92841
CA-US SNA

Barcode

Barcode Label Here

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WORK ORDER NUMBER: 18-07-7592

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Cardno

DATE: 07/21/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: -0.5°C); Temperature (w/o CF): 2.9 °C (w/ CF): 2.6 °C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: 802

CUSTODY SEAL:

Cooler ☒ Present and Intact☐ Present but Not Intact☐ Not Present☐ N/AChecked by: 802Sample(s) ☐ Present and Intact☐ Present but Not Intact☒ Not Present☐ N/AChecked by: 778

SAMPLE CONDITION:

Yes No N/A

Chain-of-Custody (COC) document(s) received with samples ☒ ☐ ☐COC document(s) received complete ☒ ☐ ☐☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ ☐ ☐Sample container label(s) consistent with COC ☐ ☒ ☐Sample container(s) intact and in good condition ☒ ☐ ☐Proper containers for analyses requested ☒ ☐ ☐Sufficient volume/mass for analyses requested ☒ ☐ ☐Samples received within holding time ☒ ☐ ☐

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ ☐ ☒Proper preservation chemical(s) noted on COC and/or sample container ☒ ☐ ☐

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☒ ☐ ☐Container(s) for certain analysis free of headspace ☒ ☐ ☐☒ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ ☐ ☒

CONTAINER TYPE:

(Trip Blank Lot Number: 180709B)Aqueous: ☐ VOA ☒ VOA_h ☐ VOA_{na2} ☐ 100PJ ☐ 100PJ_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☒ 125PB ☐ 125PB_{znna} (pH 9)☐ 250AGB ☐ 250CGB ☐ 250CGB_s (pH 2) ☒ 250PB ☒ 250PB_h (pH 2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s (pH 2) ☐ 500PB☒ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s (pH 2) ☐ 1AGB_s (O&G) ☒ 1PB ☐ 1PB_{na} (pH 12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: 776s = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, znna = Zn (CH₃CO₂)₂ + NaOHReviewed by: 1017



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WORK ORDER NUMBER: **18-07-1592****SAMPLE ANOMALY REPORT**DATE: **07/21/2018****SAMPLES, CONTAINERS, AND LABELS:**

- ☐ Sample(s) NOT RECEIVED but listed on COC
- ☐ Sample(s) received but NOT LISTED on COC
- ☐ Holding time expired (list client or ECI sample ID and analysis)
- ☐ Insufficient sample amount for requested analysis (list analysis)
- ☐ Improper container(s) used (list analysis)
- ☐ Improper preservative used (list analysis)
- ☐ pH outside acceptable range (list analysis)
- ☐ No preservative noted on COC or label (list analysis and notify lab)
- ☐ Sample container(s) not labeled
- ☐ Client sample label(s) illegible (list container type and analysis)
- ☒ Client sample label(s) do not match COC (comment)
- ☐ Project information
- ☐ Client sample ID
- ☐ Sampling date and/or time
- ☐ Number of container(s)
- ☒ Requested analysis
- ☐ Sample container(s) compromised (comment)
- ☐ Broken
- ☐ Water present in sample container
- ☐ Air sample container(s) compromised (comment)
- ☐ Flat
- ☐ Very low in volume
- ☐ Leaking (not transferred; duplicate bag submitted)
- ☐ Leaking (transferred into ECI Tedlar™ bags*)
- ☐ Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

MISCELLANEOUS: (Describe)**HEADSPACE:**

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

Comments: _____

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

Comments

(4) Trip blank received
2 - Vials for all tests

Comments

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Reported by: 28Reviewed by: 1017



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**WORK ORDER NUMBER: 18-07-1593***The difference is service*

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For**Client:** Cardno**Client Project Name:** ExxonMobil Gladiola Station**Attention:** David Purdy
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825Approved for release on 08/06/2018 by:
Cecile deGuia
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



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Work Order Number: 18-07-1593

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Work Order: 18-07-1593

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Work Order Narrative

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 07/21/18. They were assigned to Work Order 18-07-1593.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

DoD Projects:

The test results contained in this report are accredited under the laboratory's ISO/IEC 17025:2005 and DoD-ELAP accreditation issued by the ANSI-ASQ National Accreditation Board. Refer to certificate and scope of accreditation ADE-1864.


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Client: Cardno	Work Order: 18-07-1593
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	PO Number:
	Date/Time Received: 07/21/18 11:30
	Number of Containers: 23
Attn: David Purdy	

Sample Summary

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
W-39-MW6	18-07-1593-1	07/20/18 07:30	11	Aqueous
W-41-MW10	18-07-1593-2	07/20/18 08:15	11	Aqueous
TRIP BLANK	18-07-1593-3	07/20/18 00:00	1	Aqueous

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Sample ID: 1 (W-39-MW6, Aqueous) Sampled: 07/20/18 07:30									
EPA 300.0 Anions (Extraction Method: N/A) Container - F									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Sulfate	180		mg/L	2.4	5.0	5.00	07/24/18 00:11	EPA 300.0	180723L01
SM 2320B Alkalinity (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Alkalinity, Total (as CaCO3)	430		mg/L	1.7	5.0	1.00	07/24/18 02:19	SM 2320B	I0723ALKB2
SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Solids, Total Dissolved	525		mg/L	0.870	1.00	1.00	07/24/18 16:00	SM 2540 C	I0724TDSL2
SM 4500-CL C Chloride (Extraction Method: N/A) Container - G									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Chloride	4.6		mg/L	0.76	2.0	1.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Arsenic	0.0284		mg/L	0.00438	0.0100	1.00	08/03/18 15:48	EPA 6010B	180730LA5
Barium	0.288		mg/L	0.00296	0.0100	1.00	08/03/18 15:48	EPA 6010B	180730LA5
Cadmium	ND		mg/L	0.00269	0.0100	1.00	08/03/18 15:48	EPA 6010B	180730LA5
Chromium	0.00674	J	mg/L	0.00271	0.0100	1.00	08/03/18 15:48	EPA 6010B	180730LA5
Lead	0.00430	J	mg/L	0.00406	0.0100	1.00	08/03/18 15:48	EPA 6010B	180730LA5
Selenium	0.0344		mg/L	0.00699	0.0150	1.00	08/03/18 15:48	EPA 6010B	180730LA5
Silver	ND		mg/L	0.00139	0.00500	1.00	08/03/18 15:48	EPA 6010B	180730LA5
EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Mercury	0.000190	B,J	mg/L	0.000045 3	0.000200	1.00	08/02/18 15:18	EPA 7470A	180802LA1M
EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - I									
- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.									
Naphthalene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
2-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Acenaphthylene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Acenaphthene	ND		mg/L	0.000058	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Fluorene	ND		mg/L	0.000070	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Phenanthrene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Fluoranthene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		mg/L	0.000069	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Chrysene	ND		mg/L	0.000064	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		mg/L	0.000077	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		mg/L	0.000082	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Benzo (a) Pyrene	ND		mg/L	0.000098	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	0.000079	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		mg/L	0.000074	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		mg/L	0.000092	0.00019	1.00	07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	69%						07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	70%						07/26/18 20:47	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	71%						07/26/18 20:47	EPA 8270C SIM PAHs	180725L01

EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - A

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Benzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Toluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Ethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
o-Xylene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
p/m-Xylene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Xylenes (total)	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	0.00020	0.0010	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,1,1,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,1,1-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,1,2,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,1,2-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	0.00024	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,1-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,1-Dichloroethene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,1-Dichloropropene	ND		mg/L	0.00030	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,2,3-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,2,3-Trichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,2,4-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036



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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
1,2,4-Trimethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,3,5-Trimethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
c-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,2-Dibromo-3-Chloropropane	ND		mg/L	0.0020	0.0050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,2-Dibromoethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,2-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,2-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,2-Dichloropropane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
t-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
c-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,3-Dichlorobenzene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,3-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 15:33	EPA 8260B	180802L036
t-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
1,4-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
2,2-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 15:33	EPA 8260B	180802L036
2-Chlorotoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
4-Chlorotoluene	ND		mg/L	0.00036	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
4-Methyl-2-Pentanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Acetone	0.0041	J	mg/L	0.0040	0.010	1.00	08/02/18 15:33	EPA 8260B	180802L036
Bromobenzene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Bromochloromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 15:33	EPA 8260B	180802L036
Bromoform	ND		mg/L	0.00025	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Bromomethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 15:33	EPA 8260B	180802L036
Carbon Disulfide	ND		mg/L	0.00040	0.0010	1.00	08/02/18 15:33	EPA 8260B	180802L036
Carbon Tetrachloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Chlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Dibromochloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Chloroethane	ND		mg/L	0.00032	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Chloroform	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Chloromethane	ND		mg/L	0.00029	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Dibromomethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Bromodichloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Dichlorodifluoromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 15:33	EPA 8260B	180802L036
Hexachloro-1,3-Butadiene	ND		mg/L	0.00080	0.0020	1.00	08/02/18 15:33	EPA 8260B	180802L036
Isopropylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
2-Butanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 15:33	EPA 8260B	180802L036
Methylene Chloride	ND		mg/L	0.00080	0.0010	1.00	08/02/18 15:33	EPA 8260B	180802L036
2-Hexanone	ND		mg/L	0.0040	0.010	1.00	08/02/18 15:33	EPA 8260B	180802L036
Naphthalene	ND		mg/L	0.00040	0.010	1.00	08/02/18 15:33	EPA 8260B	180802L036
n-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
n-Propylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036
p-Isopropyltoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch	
sec-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036	
Styrene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036	
tert-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036	
Tetrachloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036	
Trichloroethene	ND		mg/L	0.00029	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036	
Trichlorofluoromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036	
Vinyl Chloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 15:33	EPA 8260B	180802L036	
Surr: 1,4-Bromofluorobenzene (68-120%)							100%	08/02/18 15:33	EPA 8260B	180802L036
Surr: Dibromofluoromethane (80-127%)							102%	08/02/18 15:33	EPA 8260B	180802L036
Surr: 1,2-Dichloroethane-d4 (80-128%)							103%	08/02/18 15:33	EPA 8260B	180802L036
Surr: Toluene-d8 (80-120%)							101%	08/02/18 15:33	EPA 8260B	180802L036

Sample ID: 2 (W-41-MW10, Aqueous) Sampled: 07/20/18 08:15

EPA 300.0 Anions (Extraction Method: N/A) Container - F

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Sulfate	100		mg/L	0.98	2.0	2.00	07/24/18 00:29	EPA 300.0	180723L01
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SM 2320B Alkalinity (Extraction Method: N/A) Container - G

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Alkalinity, Total (as CaCO3)	600		mg/L	1.7	5.0	1.00	07/24/18 02:19	SM 2320B	I0723ALKB2
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SM 2540 C Total Dissolved Solids (Extraction Method: N/A) Container - K

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Solids, Total Dissolved	1110		mg/L	0.870	10.0	1.00	07/24/18 16:00	SM 2540 C	I0724TDSL2
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SM 4500-CL C Chloride (Extraction Method: N/A) Container - G

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Chloride	140		mg/L	0.76	2.0	1.00	07/24/18 18:00	SM 4500-CL C	I0724CLCL1
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EPA 6010B ICP Metals (Extraction Method: EPA 3010A Total) Container - H

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Arsenic	ND		mg/L	0.00438	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Barium	0.0986		mg/L	0.00296	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Cadmium	ND		mg/L	0.00269	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Chromium	0.00305	J	mg/L	0.00271	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Lead	0.00666	J	mg/L	0.00406	0.0100	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Selenium	0.0235		mg/L	0.00699	0.0150	1.00	08/03/18 15:49	EPA 6010B	180730LA5
Silver	ND		mg/L	0.00139	0.00500	1.00	08/03/18 15:49	EPA 6010B	180730LA5

EPA 7470A Mercury (Extraction Method: EPA 7470A Total) Container - H

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Mercury	0.000779	B	mg/L	0.000045	0.000200	1.00	08/02/18 15:20	EPA 7470A	180802LA1M
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EPA 8270C SIM PAHs (Extraction Method: EPA 3510C) Container - I

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Naphthalene	ND		mg/L	0.000071	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
2-Methylnaphthalene	ND		mg/L	0.000073	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
1-Methylnaphthalene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Acenaphthylene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Acenaphthene	ND		mg/L	0.000059	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Fluorene	0.00017	J	mg/L	0.000071	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Phenanthrene	ND		mg/L	0.000065	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Anthracene	ND		mg/L	0.000066	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Fluoranthene	ND		mg/L	0.000072	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Pyrene	ND		mg/L	0.000069	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Benzo (a) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Chrysene	ND		mg/L	0.000064	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Benzo (k) Fluoranthene	ND		mg/L	0.000078	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Benzo (b) Fluoranthene	ND		mg/L	0.000083	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Benzo (a) Pyrene	ND		mg/L	0.000099	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	0.000080	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Dibenz (a,h) Anthracene	ND		mg/L	0.000075	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Benzo (g,h,i) Perylene	ND		mg/L	0.000092	0.00019	1.00	07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Surr: Nitrobenzene-d5 (28-139%)	76%						07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Surr: 2-Fluorobiphenyl (33-144%)	85%						07/26/18 21:07	EPA 8270C SIM PAHs	180725L01
Surr: p-Terphenyl-d14 (23-160%)	90%						07/26/18 21:07	EPA 8270C SIM PAHs	180725L01

EPA 8260B Volatile Organics (Extraction Method: EPA 5030C) Container - A

- Results were evaluated to the MDL (DL), concentrations >= to the MDL (DL) but < RL (LOQ), if found, are qualified with a "J" flag.

Benzene	0.00078		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Toluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Ethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
o-Xylene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
p/m-Xylene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Xylenes (total)	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	0.00020	0.0010	1.00	08/02/18 16:03	EPA 8260B	180802L036



Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
1,1,1,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,1,1-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,1,2,2-Tetrachloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,1,2-Trichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	0.00024	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,1-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,1-Dichloroethene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,1-Dichloropropene	ND		mg/L	0.00030	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,2,3-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,2,3-Trichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,2,4-Trichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,2,4-Trimethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,3,5-Trimethylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
c-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,2-Dibromo-3-Chloropropane	ND		mg/L	0.0020	0.0050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,2-Dibromoethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,2-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,2-Dichloroethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,2-Dichloropropane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
t-1,2-Dichloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
c-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,3-Dichlorobenzene	ND		mg/L	0.00028	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,3-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 16:03	EPA 8260B	180802L036
t-1,3-Dichloropropene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
1,4-Dichlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
2,2-Dichloropropane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 16:03	EPA 8260B	180802L036
2-Chlorotoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
4-Chlorotoluene	ND		mg/L	0.00036	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
4-Methyl-2-Pentanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Acetone	0.0081	J	mg/L	0.0040	0.010	1.00	08/02/18 16:03	EPA 8260B	180802L036
Bromobenzene	ND		mg/L	0.00032	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Bromochloromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 16:03	EPA 8260B	180802L036
Bromoform	ND		mg/L	0.00025	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Bromomethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 16:03	EPA 8260B	180802L036
Carbon Disulfide	ND		mg/L	0.00040	0.0010	1.00	08/02/18 16:03	EPA 8260B	180802L036
Carbon Tetrachloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Chlorobenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Dibromochloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Chloroethane	ND		mg/L	0.00032	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Chloroform	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Chloromethane	ND		mg/L	0.00029	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Dibromomethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

Analytical Report

Analyte	Result	Flag	Units	MDL	RL	Dilution Factor	Analysis Date/Time	Method	Batch
Bromodichloromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Dichlorodifluoromethane	ND		mg/L	0.00040	0.0010	1.00	08/02/18 16:03	EPA 8260B	180802L036
Hexachloro-1,3-Butadiene	ND		mg/L	0.00080	0.0020	1.00	08/02/18 16:03	EPA 8260B	180802L036
Isopropylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
2-Butanone	ND		mg/L	0.0020	0.0050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Methylene Chloride	ND		mg/L	0.00080	0.0010	1.00	08/02/18 16:03	EPA 8260B	180802L036
2-Hexanone	ND		mg/L	0.0040	0.010	1.00	08/02/18 16:03	EPA 8260B	180802L036
Naphthalene	ND		mg/L	0.00040	0.010	1.00	08/02/18 16:03	EPA 8260B	180802L036
n-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
n-Propylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
p-Isopropyltoluene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
sec-Butylbenzene	0.00060		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Styrene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
tert-Butylbenzene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Tetrachloroethene	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Trichloroethene	ND		mg/L	0.00029	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Trichlorofluoromethane	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Vinyl Chloride	ND		mg/L	0.00020	0.00050	1.00	08/02/18 16:03	EPA 8260B	180802L036
Surr: 1,4-Bromofluorobenzene (68-120%)	101%						08/02/18 16:03	EPA 8260B	180802L036
Surr: Dibromofluoromethane (80-127%)	101%						08/02/18 16:03	EPA 8260B	180802L036
Surr: 1,2-Dichloroethane-d4 (80-128%)	101%						08/02/18 16:03	EPA 8260B	180802L036
Surr: Toluene-d8 (80-120%)	101%						08/02/18 16:03	EPA 8260B	180802L036

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Calscience

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
EPA 300.0 Anions						
099-12-906-8665						
Sulfate	ND		mg/L	180723L01	099-12-906-8665	07/23/18 10:26
SM 2320B Alkalinity						
099-17-086-19						
Alkalinity, Total (as CaCO3)	ND		mg/L	I0723ALKB2	099-17-086-19	07/24/18 02:19
SM 2540 C Total Dissolved Solids						
099-12-180-6308						
Solids, Total Dissolved	ND		mg/L	I0724TDSL2	099-12-180-6308	07/24/18 16:00
SM 4500-CL C Chloride						
099-05-057-2222						
Chloride	ND		mg/L	I0724CLCL1	099-05-057-2222	07/24/18 18:00
EPA 6010B ICP Metals						
097-01-003-16987						
Arsenic	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Barium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Cadmium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Chromium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Lead	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Selenium	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
Silver	ND		mg/L	180730LA5	097-01-003-16987	08/03/18 14:53
EPA 7470A Mercury						
099-12-457-382						
Mercury	0.0000644	J	mg/L	180802LA1M	099-12-457-382	08/02/18 14:34
EPA 8270C SIM PAHs						
099-06-008-1064						
Naphthalene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
2-Methylnaphthalene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
1-Methylnaphthalene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Acenaphthylene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Acenaphthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Fluorene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Phenanthrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Anthracene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Fluoranthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Pyrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (a) Anthracene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Chrysene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
Benzo (k) Fluoranthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (b) Fluoranthene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (a) Pyrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Indeno (1,2,3-c,d) Pyrene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Dibenz (a,h) Anthracene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Benzo (g,h,i) Perylene	ND		mg/L	180725L01	099-06-008-1064	07/26/18 15:00
Surr: Nitrobenzene-d5 (28-139%)	85%			180725L01	099-06-008-1064	07/26/18 15:00
Surr: 2-Fluorobiphenyl (33-144%)	84%			180725L01	099-06-008-1064	07/26/18 15:00
Surr: p-Terphenyl-d14 (23-160%)	93%			180725L01	099-06-008-1064	07/26/18 15:00

EPA 8260B Volatile Organics

099-12-878-755

Benzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Toluene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Ethylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
o-Xylene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
p/m-Xylene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Xylenes (total)	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Methyl-t-Butyl Ether (MTBE)	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,1,2-Tetrachloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,1-Trichloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,2,2-Tetrachloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,2-Trichloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1-Dichloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1-Dichloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,1-Dichloropropene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2,3-Trichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2,3-Trichloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2,4-Trichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2,4-Trimethylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,3,5-Trimethylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
c-1,2-Dichloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dibromo-3-Chloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dibromoethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dichloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,2-Dichloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
t-1,2-Dichloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
c-1,3-Dichloropropene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,3-Dichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20

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The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
1,3-Dichloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
t-1,3-Dichloropropene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
1,4-Dichlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
2,2-Dichloropropane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
2-Chlorotoluene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
4-Chlorotoluene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
4-Methyl-2-Pentanone	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Acetone	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromochloromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromoform	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromomethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Carbon Disulfide	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Carbon Tetrachloride	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Chlorobenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Dibromochloromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Chloroethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Chloroform	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Chloromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Dibromomethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Bromodichloromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Dichlorodifluoromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Hexachloro-1,3-Butadiene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Isopropylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
2-Butanone	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Methylene Chloride	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
2-Hexanone	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Naphthalene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
n-Butylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
n-Propylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
p-Isopropyltoluene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
sec-Butylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Styrene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
tert-Butylbenzene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Tetrachloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Trichloroethene	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Trichlorofluoromethane	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Vinyl Chloride	ND		mg/L	180802L036	099-12-878-755	08/02/18 11:20
Surr: 1,4-Bromofluorobenzene (68-120%)	100%			180802L036	099-12-878-755	08/02/18 11:20
Surr: Dibromofluoromethane (80-127%)	99%			180802L036	099-12-878-755	08/02/18 11:20
Surr: 1,2-Dichloroethane-d4 (80-128%)	102%			180802L036	099-12-878-755	08/02/18 11:20

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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

Attn: David Purdy

PROJECT QUALITY CONTROL DATA
Blank

Analyte	Blank Value	Qualifiers	Units	QC Batch	Lab Number	Analysis Date/Time
Surr: Toluene-d8 (80-120%)	100%			180802L036	099-12-878-755	08/02/18 11:20

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

QUALITY CONTROL Matrix Spike

Analyte	Orig. Val.	MS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
EPA 300.0 Anions										
18-07-1549-8										
Sulfate	68.80	130.9	HX	mg/L	50.00	124	80-120	180723S01	18-07-1549-8	07/23/18 15:59
SM 4500-CL C Chloride										
18-07-1591-3										
Chloride	46.59	150.6		mg/L	100.0	104	80-120	I0724CLCS1	18-07-1591-3	07/24/18 18:00
EPA 6010B ICP Metals										
18-07-1591-1										
Arsenic	ND	0.5183		mg/L	0.5000	104	80-140	180730SA5	18-07-1591-1	08/03/18 15:36
Barium	0.05900	0.5690		mg/L	0.5000	102	87-123	180730SA5	18-07-1591-1	08/03/18 15:36
Cadmium	ND	0.4992		mg/L	0.5000	100	82-124	180730SA5	18-07-1591-1	08/03/18 15:36
Chromium	ND	0.5051		mg/L	0.5000	101	86-122	180730SA5	18-07-1591-1	08/03/18 15:36
Lead	ND	0.5154		mg/L	0.5000	103	84-120	180730SA5	18-07-1591-1	08/03/18 15:36
Selenium	ND	0.5244		mg/L	0.5000	105	79-127	180730SA5	18-07-1591-1	08/03/18 15:36
Silver	ND	0.02846	HX	mg/L	0.2500	11	86-128	180730SA5	18-07-1591-1	08/03/18 15:36
EPA 7470A Mercury										
18-07-1594-1										
Mercury	ND	0.008332		mg/L	0.01000	83	55-133	180802SA1	18-07-1594-1	08/02/18 14:41
EPA 8260B Volatile Organics										
18-07-1647-4										
Benzene	0.0005996	0.01092		mg/L	0.01000	103	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Toluene	ND	0.01063		mg/L	0.01000	106	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Ethylbenzene	0.0005612	0.01109		mg/L	0.01000	105	75-125	180802S009	18-07-1647-4	08/02/18 14:33
o-Xylene	ND	0.01082		mg/L	0.01000	108	75-127	180802S009	18-07-1647-4	08/02/18 14:33
p/m-Xylene	0.001045	0.02241		mg/L	0.02000	107	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Methyl-t-Butyl Ether (MTBE)	ND	0.008748		mg/L	0.01000	87	71-131	180802S009	18-07-1647-4	08/02/18 14:33
1,1-Dichloroethene	ND	0.01089		mg/L	0.01000	109	66-126	180802S009	18-07-1647-4	08/02/18 14:33
1,2-Dibromoethane	ND	0.01020		mg/L	0.01000	102	75-126	180802S009	18-07-1647-4	08/02/18 14:33
1,2-Dichlorobenzene	ND	0.01045		mg/L	0.01000	105	75-125	180802S009	18-07-1647-4	08/02/18 14:33
1,2-Dichloroethane	ND	0.01051		mg/L	0.01000	105	75-127	180802S009	18-07-1647-4	08/02/18 14:33
Carbon Tetrachloride	ND	0.01014		mg/L	0.01000	101	69-135	180802S009	18-07-1647-4	08/02/18 14:33
Chlorobenzene	ND	0.01025		mg/L	0.01000	102	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Trichloroethene	ND	0.01011		mg/L	0.01000	101	75-125	180802S009	18-07-1647-4	08/02/18 14:33
Vinyl Chloride	ND	0.01157		mg/L	0.01000	116	52-142	180802S009	18-07-1647-4	08/02/18 14:33

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

QUALITY CONTROL Matrix Spike Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
EPA 300.0 Anions												
18-07-1549-8												
Sulfate	68.80	131.3	HX	mg/L	50.00	125	80-120	0	0-20	180723S01	18-07-1549-8	07/23/18 16:18
SM 4500-CL C Chloride												
18-07-1591-3												
Chloride	46.59	150.1		mg/L	100.0	103	80-120	0	0-25	10724CLCS1	18-07-1591-3	07/24/18 18:00
EPA 6010B ICP Metals												
18-07-1591-1												
Arsenic	ND	0.5016		mg/L	0.5000	100	80-140	3	0-11	180730SA5	18-07-1591-1	08/03/18 15:37
Barium	0.05900	0.5666		mg/L	0.5000	102	87-123	0	0-6	180730SA5	18-07-1591-1	08/03/18 15:37
Cadmium	ND	0.4994		mg/L	0.5000	100	82-124	0	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
Chromium	ND	0.5010		mg/L	0.5000	100	86-122	1	0-8	180730SA5	18-07-1591-1	08/03/18 15:37
Lead	ND	0.5147		mg/L	0.5000	103	84-120	0	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
Selenium	ND	0.5160		mg/L	0.5000	103	79-127	2	0-9	180730SA5	18-07-1591-1	08/03/18 15:37
Silver	ND	0.06513	HX,BA	mg/L	0.2500	26	86-128	78	0-7	180730SA5	18-07-1591-1	08/03/18 15:37
EPA 7470A Mercury												
18-07-1594-1												
Mercury	ND	0.007775		mg/L	0.01000	78	55-133	7	0-20	180802SA1	18-07-1594-1	08/02/18 14:48
EPA 8260B Volatile Organics												
18-07-1647-4												
Benzene	0.0005996	0.01074		mg/L	0.01000	101	75-125	2	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Toluene	ND	0.01045		mg/L	0.01000	105	75-125	2	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Ethylbenzene	0.0005612	0.01102		mg/L	0.01000	105	75-125	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
o-Xylene	ND	0.01068		mg/L	0.01000	107	75-127	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
p/m-Xylene	0.001045	0.02220		mg/L	0.02000	106	75-125	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Methyl-t-Butyl Ether (MTBE)	ND	0.008666		mg/L	0.01000	87	71-131	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
1,1-Dichloroethene	ND	0.01062		mg/L	0.01000	106	66-126	3	0-20	180802S009	18-07-1647-4	08/02/18 15:03
1,2-Dibromoethane	ND	0.01017		mg/L	0.01000	102	75-126	0	0-20	180802S009	18-07-1647-4	08/02/18 15:03
1,2-Dichlorobenzene	ND	0.01037		mg/L	0.01000	104	75-125	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
1,2-Dichloroethane	ND	0.01035		mg/L	0.01000	103	75-127	2	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Carbon Tetrachloride	ND	0.01008		mg/L	0.01000	101	69-135	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Chlorobenzene	ND	0.01021		mg/L	0.01000	102	75-125	0	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Trichloroethene	ND	0.01022		mg/L	0.01000	102	75-125	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03
Vinyl Chloride	ND	0.01140		mg/L	0.01000	114	52-142	1	0-20	180802S009	18-07-1647-4	08/02/18 15:03

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Calscience

The difference is service

Client:	Cardno	Work Order:	18-07-1593
	20505 Crescent Bay Drive	Project Name:	ExxonMobil Gladiola Station
	Lake Forest, CA 92630-8825	Date Received:	07/21/18

QUALITY CONTROL
Post Digestion Spike

Analyte	Orig. Val.	PDS Val.	Qual.	Units	Spike Conc.	% Rec.	Target Range	Batch	Sample Spiked	Analysis Date/Time
EPA 6010B ICP Metals										
18-07-1591-1										
Arsenic	ND	0.4856		mg/L	0.5000	97	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Barium	0.05900	0.5799		mg/L	0.5000	104	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Cadmium	ND	0.5102		mg/L	0.5000	102	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Chromium	ND	0.5095		mg/L	0.5000	102	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Lead	ND	0.5332		mg/L	0.5000	107	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Selenium	ND	0.5419		mg/L	0.5000	108	75-125	180730SA5	18-07-1591-1	08/03/18 15:37
Silver	ND	0.2234		mg/L	0.2500	89	75-125	180730SA5	18-07-1591-1	08/03/18 15:37

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Qual: Qualifiers



The difference is service

Client: Cardno	Work Order: 18-07-1593
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

QUALITY CONTROL
Post Digestion Spike Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	Spike Conc.	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
EPA 6010B ICP Metals												
18-07-1591-1												
Arsenic	ND	0.4871		mg/L	0.5000	97	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Barium	0.05900	0.5823		mg/L	0.5000	105	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Cadmium	ND	0.5035		mg/L	0.5000	101	75-125	1	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Chromium	ND	0.5110		mg/L	0.5000	102	75-125	0	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Lead	ND	0.5142		mg/L	0.5000	103	75-125	4	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Selenium	ND	0.4838		mg/L	0.5000	97	75-125	11	0-20	180730SA5	18-07-1591-1	08/03/18 15:38
Silver	ND	0.2274		mg/L	0.2500	91	75-125	2	0-20	180730SA5	18-07-1591-1	08/03/18 15:38

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Qual - Qualifiers RPD: Relative Percent Difference

Client:	Cardno	Work Order:	18-07-1593
	20505 Crescent Bay Drive	Project Name:	ExxonMobil Gladiola Station
	Lake Forest, CA 92630-8825	Date Received:	07/21/18

QUALITY CONTROL
Sample Duplicate

Analyte	Orig. Val.	Duplicate	Qual.	Units	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
SM 2320B Alkalinity									
18-07-1456-3									
Alkalinity, Total (as CaCO3)	52.80	52.74		mg/L	0	0-25	I0723ALKD2	18-07-1456-3	07/24/18 02:19
SM 2540 C Total Dissolved Solids									
18-07-1387-6									
Solids, Total Dissolved	32020	32040		mg/L	0	0-20	I0724TDSD4	18-07-1387-6	07/24/18 16:00

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RPD: Relative Percent Difference.



Calscience

The difference is service

Client: Cardno	Work Order: 18-07-1593
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA

Laboratory Control Sample

Analyte	Known Val.	Analyzed	Qual.	Units	% Rec.	Target Range	Batch	Analysis Date/Time
EPA 300.0 Anions								
099-12-906-8665								
Sulfate	50.00	48.74		mg/L	97	90-110	180723L01	07/23/18 10:45
SM 2320B Alkalinity								
099-17-086-19								
Alkalinity, Total (as CaCO3)	100.0	110.3		mg/L	110	80-120	10723ALKB2	07/24/18 02:19
SM 2540 C Total Dissolved Solids								
099-12-180-6308								
Solids, Total Dissolved	100.0	95.00		mg/L	95	80-120	10724TDSL2	07/24/18 16:00
SM 4500-CL C Chloride								
099-05-057-2222								
Chloride	100.0	100.6		mg/L	101	80-120	10724CLCL1	07/24/18 18:00
EPA 6010B ICP Metals								
097-01-003-16987								
Arsenic	0.5000	0.4415		mg/L	88	80-120	180730LA5	08/03/18 14:55
Barium	0.5000	0.5081		mg/L	102	80-120	180730LA5	08/03/18 14:55
Cadmium	0.5000	0.5186		mg/L	104	80-120	180730LA5	08/03/18 14:55
Chromium	0.5000	0.4881		mg/L	98	80-120	180730LA5	08/03/18 14:55
Lead	0.5000	0.5019		mg/L	100	80-120	180730LA5	08/03/18 14:55
Selenium	0.5000	0.4333		mg/L	87	80-120	180730LA5	08/03/18 14:55
Silver	0.2500	0.2235		mg/L	89	80-120	180730LA5	08/03/18 14:55
EPA 7470A Mercury								
099-12-457-382								
Mercury	0.01000	0.008974		mg/L	90	80-120	180802LA1M	08/02/18 14:37
EPA 8270C SIM PAHs								
099-06-008-1064								
Naphthalene	0.002000	0.001772		mg/L	89	21-133	180725L01	07/26/18 15:21
2-Methylnaphthalene	0.002000	0.001834		mg/L	92	21-140	180725L01	07/26/18 15:21
1-Methylnaphthalene	0.002000	0.001825		mg/L	91	20-140	180725L01	07/26/18 15:21
Acenaphthylene	0.002000	0.001684		mg/L	84	33-145	180725L01	07/26/18 15:21
Acenaphthene	0.002000	0.001755		mg/L	88	55-121	180725L01	07/26/18 15:21
Fluorene	0.002000	0.001827		mg/L	91	59-121	180725L01	07/26/18 15:21
Phenanthrene	0.002000	0.001956		mg/L	98	54-120	180725L01	07/26/18 15:21
Anthracene	0.002000	0.001907		mg/L	95	27-133	180725L01	07/26/18 15:21
Fluoranthene	0.002000	0.001974		mg/L	99	26-137	180725L01	07/26/18 15:21
Pyrene	0.002000	0.001940		mg/L	97	45-129	180725L01	07/26/18 15:21
Benzo (a) Anthracene	0.002000	0.001990		mg/L	100	33-143	180725L01	07/26/18 15:21
Chrysene	0.002000	0.001964		mg/L	98	17-168	180725L01	07/26/18 15:21
Benzo (k) Fluoranthene	0.002000	0.001965		mg/L	98	24-159	180725L01	07/26/18 15:21

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Calscience

The difference is service

Client: Cardno	Work Order: 18-07-1593
20505 Crescent Bay Drive	Project Name: ExxonMobil Gladiola Station
Lake Forest, CA 92630-8825	Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA
Laboratory Control Sample

Analyte	Known Val.	Analyzed	Qual.	Units	% Rec.	Target Range	Batch	Analysis Date/Time
Benzo (b) Fluoranthene	0.002000	0.002010		mg/L	100	24-159	180725L01	07/26/18 15:21
Benzo (a) Pyrene	0.002000	0.002048		mg/L	102	17-163	180725L01	07/26/18 15:21
Indeno (1,2,3-c,d) Pyrene	0.002000	0.001966		mg/L	98	25-175	180725L01	07/26/18 15:21
Dibenz (a,h) Anthracene	0.002000	0.001865		mg/L	93	25-175	180725L01	07/26/18 15:21
Benzo (g,h,i) Perylene	0.002000	0.002193		mg/L	110	25-157	180725L01	07/26/18 15:21

Total number of LCS compounds: 18
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

EPA 8260B Volatile Organics**099-12-878-755**

Benzene	0.01000	0.01075		mg/L	108	80-120	180802L036	08/02/18 09:33
Toluene	0.01000	0.01080		mg/L	108	80-120	180802L036	08/02/18 09:33
Ethylbenzene	0.01000	0.01084		mg/L	108	80-120	180802L036	08/02/18 09:33
o-Xylene	0.01000	0.01075		mg/L	107	80-120	180802L036	08/02/18 09:33
p/m-Xylene	0.02000	0.02196		mg/L	110	80-120	180802L036	08/02/18 09:33
Methyl-t-Butyl Ether (MTBE)	0.01000	0.008777		mg/L	88	75-123	180802L036	08/02/18 09:33
1,1-Dichloroethene	0.01000	0.01081		mg/L	108	77-120	180802L036	08/02/18 09:33
1,2-Dibromoethane	0.01000	0.01018		mg/L	102	80-120	180802L036	08/02/18 09:33
1,2-Dichlorobenzene	0.01000	0.01072		mg/L	107	80-120	180802L036	08/02/18 09:33
1,2-Dichloroethane	0.01000	0.01056		mg/L	106	80-122	180802L036	08/02/18 09:33
Carbon Tetrachloride	0.01000	0.01043		mg/L	104	80-129	180802L036	08/02/18 09:33
Chlorobenzene	0.01000	0.01063		mg/L	106	80-120	180802L036	08/02/18 09:33
Trichloroethene	0.01000	0.01069		mg/L	107	80-120	180802L036	08/02/18 09:33
Vinyl Chloride	0.01000	0.01076		mg/L	108	63-135	180802L036	08/02/18 09:33

Total number of LCS compounds: 14
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

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Calscience

The difference is service

Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA Laboratory Control Sample Duplicate

Analyte	LCS Val.	Duplicate	Qual.	Units	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
SM 2320B Alkalinity											
099-17-086-19											
Alkalinity, Total (as CaCO ₃)	100.0	106.5		mg/L	106	80-120	4	0-20	I0723ALKB2	099-17-086-19	07/24/18 02:19
SM 2540 C Total Dissolved Solids											
099-12-180-6308											
Solids, Total Dissolved	100.0	90.00		mg/L	90	80-120	5	0-20	I0724TDSL2	099-12-180-6308	07/24/18 16:00
SM 4500-CL C Chloride											
099-05-057-2222											
Chloride	100.0	100.1		mg/L	100	80-120	0	0-20	I0724CLCL1	099-05-057-2222	07/24/18 18:00
EPA 8270C SIM PAHs											
099-06-008-1064											
Naphthalene	0.00200 0	0.001763		mg/L	88	21-133	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
2-Methylnaphthalene	0.00200 0	0.001816		mg/L	91	21-140	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
1-Methylnaphthalene	0.00200 0	0.001826		mg/L	91	20-140	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Acenaphthylene	0.00200 0	0.001727		mg/L	86	33-145	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Acenaphthene	0.00200 0	0.001824		mg/L	91	55-121	4	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Fluorene	0.00200 0	0.001932		mg/L	97	59-121	6	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Phenanthrene	0.00200 0	0.001987		mg/L	99	54-120	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Anthracene	0.00200 0	0.001954		mg/L	98	27-133	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Fluoranthene	0.00200 0	0.001987		mg/L	99	26-137	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Pyrene	0.00200 0	0.001947		mg/L	97	45-129	0	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (a) Anthracene	0.00200 0	0.002008		mg/L	100	33-143	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Chrysene	0.00200 0	0.001995		mg/L	100	17-168	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (k) Fluoranthene	0.00200 0	0.001992		mg/L	100	24-159	1	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (b) Fluoranthene	0.00200 0	0.002051		mg/L	103	24-159	2	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Benzo (a) Pyrene	0.00200 0	0.002106		mg/L	105	17-163	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Indeno (1,2,3-c,d) Pyrene	0.00200 0	0.002028		mg/L	101	25-175	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41
Dibenz (a,h) Anthracene	0.00200 0	0.002054		mg/L	103	25-175	10	0-25	180725L01	099-06-008-1064	07/26/18 15:41

Qual - Qualifiers RPD: Relative Percent Difference



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Client: Cardno
20505 Crescent Bay Drive
Lake Forest, CA 92630-8825

Work Order: 18-07-1593
Project Name: ExxonMobil Gladiola Station
Date Received: 07/21/18

PROJECT QUALITY CONTROL DATA Laboratory Control Sample Duplicate

Analyte	LCS Val.	Duplicate	Qual.	Units	% Rec.	Target Range	RPD	Limit	Batch	Sample Duplicated	Analysis Date/Time
Benzo (g,h,i) Perylene	0.00200 0	0.002253		mg/L	113	25-157	3	0-25	180725L01	099-06-008-1064	07/26/18 15:41

Total number of LCS compounds: 18

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

EPA 8260B Volatile Organics**099-12-878-755**

Benzene	0.01000	0.01030		mg/L	103	80-120	4	0-22	180802L036	099-12-878-755	08/02/18 10:02
Toluene	0.01000	0.01037		mg/L	104	80-120	4	0-28	180802L036	099-12-878-755	08/02/18 10:02
Ethylbenzene	0.01000	0.01038		mg/L	104	80-120	4	0-25	180802L036	099-12-878-755	08/02/18 10:02
o-Xylene	0.01000	0.01034		mg/L	103	80-120	4	0-30	180802L036	099-12-878-755	08/02/18 10:02
p/m-Xylene	0.02000	0.02090		mg/L	105	80-120	5	0-30	180802L036	099-12-878-755	08/02/18 10:02
Methyl-t-Butyl Ether (MTBE)	0.01000	0.008913		mg/L	89	75-123	2	0-27	180802L036	099-12-878-755	08/02/18 10:02
1,1-Dichloroethene	0.01000	0.01042		mg/L	104	77-120	4	0-26	180802L036	099-12-878-755	08/02/18 10:02
1,2-Dibromoethane	0.01000	0.01024		mg/L	102	80-120	1	0-32	180802L036	099-12-878-755	08/02/18 10:02
1,2-Dichlorobenzene	0.01000	0.01063		mg/L	106	80-120	1	0-30	180802L036	099-12-878-755	08/02/18 10:02
1,2-Dichloroethane	0.01000	0.01058		mg/L	106	80-122	0	0-23	180802L036	099-12-878-755	08/02/18 10:02
Carbon Tetrachloride	0.01000	0.009910		mg/L	99	80-129	5	0-36	180802L036	099-12-878-755	08/02/18 10:02
Chlorobenzene	0.01000	0.01025		mg/L	103	80-120	4	0-29	180802L036	099-12-878-755	08/02/18 10:02
Trichloroethene	0.01000	0.01022		mg/L	102	80-120	5	0-25	180802L036	099-12-878-755	08/02/18 10:02
Vinyl Chloride	0.01000	0.01009		mg/L	101	63-135	7	0-30	180802L036	099-12-878-755	08/02/18 10:02

Total number of LCS compounds: 14

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

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Qual - Qualifiers RPD: Relative Percent Difference



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Work Order: 18-07-1593

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Sample Analysis Summary Report

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 300.0	N/A	27	IC 10	1
EPA 6010B	EPA 3010A Total	1080	ICP 8300	1
EPA 7470A	EPA 7470A Total	868	Mercury 07	1
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8270C SIM PAHs	EPA 3510C	928	GC/MS EEE	1
SM 2320B	N/A	834	PCT 1	1
SM 2540 C	N/A	1136	N/A	1
SM 4500-CI C	N/A	1086	BUR02	1


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Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841



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Work Order: 18-07-1593

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Glossary of Terms and Qualifiers

Qualifiers	Definition
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stdns.
HO	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS was in control.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
SG	A silica gel cleanup procedure was performed.
SN	See applicable analysis comment.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

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1593

... HUBA (949) 457-8950
CARDINO
20505 CRESCENT BAY DR
LAKE FOREST, CA 92630
UNITED STATES US

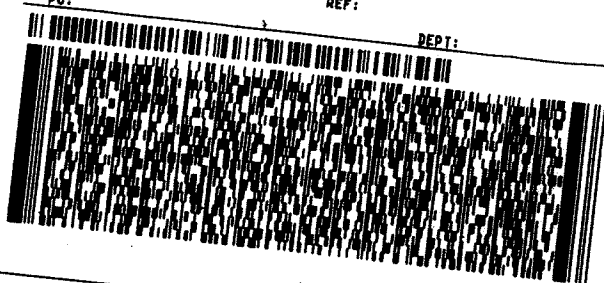
SHIP DATE: 20JUL18
ACTWGT: 45.50 LB
CAD: 006994246/SSFE1904
DIMS: 15x15x15 IN
BILL THIRD PARTY

Part # 156297-333/RSO/EXP 01/19

EUROFINS CALSCIENCE INC
7440 LINCOLN WAY

GARDEN GROVE CA 92841

(714) 882-5826
REF: DEPT:



FedEx
Express



1 of 5
TRK# 7727 7903 7947
0201
MASTER

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO APVA

92841
CA-US SNA



RT 138
ST 25

3 12:00 B
7947
07.21

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Calscience

WORK ORDER NUMBER: 18-07-1959

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1CLIENT: CardnoDATE: 07/21/2018

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)

Thermometer ID: SC6 (CF: -0.5°C); Temperature (w/o CF): 2.9°C (w/ CF): 2.6°C; ☒ Blank ☐ Sample☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____)☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling☐ Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature: ☐ Air ☐ FilterChecked by: SR

CUSTODY SEAL:

Cooler ☒ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/AChecked by: SRSample(s) ☐ Present and Intact ☐ Present but Not Intact ☒ Not Present ☐ N/AChecked by: SR

SAMPLE CONDITION:

Yes No N/A

Chain-of-Custody (COC) document(s) received with samples ☒ ☐ ☐COC document(s) received complete ☒ ☐ ☐☐ Sampling date ☐ Sampling time ☐ Matrix ☐ Number of containers☐ No analysis requested ☐ Not relinquished ☐ No relinquished date ☐ No relinquished timeSampler's name indicated on COC ☒ ☐ ☐Sample container label(s) consistent with COC ☒ ☐ ☐Sample container(s) intact and in good condition ☒ ☐ ☐Proper containers for analyses requested ☒ ☐ ☐Sufficient volume/mass for analyses requested ☒ ☐ ☐Samples received within holding time ☒ ☐ ☐

Aqueous samples for certain analyses received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfide ☐ Dissolved Oxygen ☐ ☐ ☒Proper preservation chemical(s) noted on COC and/or sample container ☒ ☐ ☐

Unpreserved aqueous sample(s) received for certain analyses

☐ Volatile Organics ☐ Total Metals ☐ Dissolved MetalsAcid/base preserved samples - pH within acceptable range ☒ ☐ ☐Container(s) for certain analysis free of headspace ☒ ☐ ☐☐ Volatile Organics ☐ Dissolved Gases (RSK-175) ☐ Dissolved Oxygen (SM 4500)☐ Carbon Dioxide (SM 4500) ☐ Ferrous Iron (SM 3500) ☐ Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation ☐ ☐ ☒

CONTAINER TYPE:

(Trip Blank Lot Number: 180709B)Aqueous: ☐ VOA ☒ VOA_h ☐ VOAn₂ ☐ 100PJ ☐ 100PJna₂ ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☒ 125PB ☐ 125PBz_{na} (pH__9)☐ 250AGB ☐ 250CGB ☐ 250CGBs (pH__2) ☒ 250PB ☒ 250PB_n (pH__2) ☐ 500AGB ☐ 500AGJ ☐ 500AGJs (pH__2) ☐ 500PB☒ 1AGB ☐ 1AGBna₂ ☐ 1AGBs (pH__2) ☐ 1AGBs (O&G) ☒ 1PB ☐ 1PBna (pH__12) ☐ _____ ☐ _____ ☐ _____Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® (____) ☐ TerraCores® (____) ☐ _____ ☐ _____ ☐ _____Air: ☐ Tedlar™ ☐ Canister ☐ Sorbent Tube ☐ PUF ☐ _____ Other Matrix (____): ☐ _____ ☐ _____ ☐ _____

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO₃, na = NaOH, na₂ = Na₂S₂O₃, p = H₃PO₄, Labeled/Checked by: SRs = H₂SO₄, u = ultra-pure, x = Na₂SO₃+NaHSO₄.H₂O, z_{na} = Zn (CH₃CO₂)₂ + NaOHReviewed by: 101

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/contact-us>

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

CONDITIONS

Action 409544

CONDITIONS

Operator: EXXON MOBIL CORPORATION P.O. Box 4358 Houston, TX 77210	OGRID: 7673
	Action Number: 409544
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	First through Third Quarter 2018 Semi-Annual Groundwater Monitoring Report accepted for the record, App ID: 409544	12/16/2024