CONCHO

July 9, 2021

Oil Conservation Division, District I
1625 N. French Dr.
Hobbs, NM 88240

Bureau of Land Management, CFO
620 E. Green St.
Carlsbad, NM 88220

Re: Closure Request Report
King Tut Federal CTB (4.3.21)
Tracking # NAPP2110642327
GPS: 32.19545, -103.71811
Unit Letter D Section 30, Township 24 South, Range 32 East
Lea County, New Mexico

To Whom it May Concern,

COG Operating, LLC (COG) is pleased to submit the following closure report in response to the fire that occurred at the King Tut Federal 001H located in Unit Letter D Section 30, Township 24 South, Range 32 East in Lea County, New Mexico. The spill site coordinates are 32.19545, -103.71811.

BACKGROUND
The fire occurred on April 3, 2021, and a C-141 initial report was submitted and approved by the New Mexico Oil Conservation Division (NMOCD). The fire occurred due to a malfunction, sending fluids to the flare which occurred in a flare fire on the pad. Less than one (1) barrel of oil was released and burnt. No fluids were recovered. The initial C-141 is shown in Appendix A.

GROUNDWATER AND REGULATORY
According to the New Mexico Office of State Engineer (NMOSE) and the United States Geological Survey (USGS) website no water wells were found within one (1) mile of the release area.

A borehole was drilled within a ½ mile of the release to a depth of fifty-five (55) feet below surface and open for 72 hrs. After 72 hours, the borehole was gauged for presence of groundwater and no water was present. (Drilling log and map of location in Appendix B).

A risk-based evaluation and site determination was performed in accordance to the New Mexico Oil Conservation Division (NMOCD) Rule (Title 19 Chapter 15 Part 29) for releases on oil and gas development and production facilities in New Mexico (effective August 14, 2018). According to the site character evaluation, the release area is located in low karst. No other receptors (water wells, playas, water course, lake beds or ordinance boundaries) were located within each specific boundaries or distance from the site.

The groundwater data and the site characterization evaluation data is summarized in Appendix B. The delineation and closure criteria are listed below:

General Site Characterization and Groundwater:

Site Characterization	Average Groundwater Depth (ft.)
Low Karst	50-100 ft

Delineation and Closure Criteria:

Remedial Action Levels (RALs)	
Chlorides	10,000 mg/kg
TPH (GRO and DRO and MRO)	2,500mg/kg
Benzene	10 mg/kg
Total BTEX	50 mg/kg

REMEDIAL ACTIONS

- The pad was scraped around the flare were the fire occurred. A five-point composite sample was collected.
- Table 1 shows the analytical results.
- All the excavated material was hauled to an NMOCD approved solid waste disposal facility.
- The analytical data shown in Table 1 show that the release area meets NMOCD closure criteria (NMAC 19.15.29.12(E) Table I).

REQUEST FOR CLOSURE

COG Operating, LLC respectfully requests that the New Mexico Oil Conservation Division and the Bureau of Land Management grant closure approval for the King Tut Federal CTB fire that occurred on April 3, 2021. (Tracking # NAPP2110642327).

Should you have any questions or concerns on the closure report, please do not hesitate to contact me.

Sincerely,

Jacqui Harris
Environmental Coordinator
Jacqui.Harris@conocophillips.com

Maps

Site Map

7/9/2021, 10:05:14 AM

1:2,257

0 0.02 0.04 0.09 mi

0 0.04 0.07 0.14 km

Maxar, Microsoft

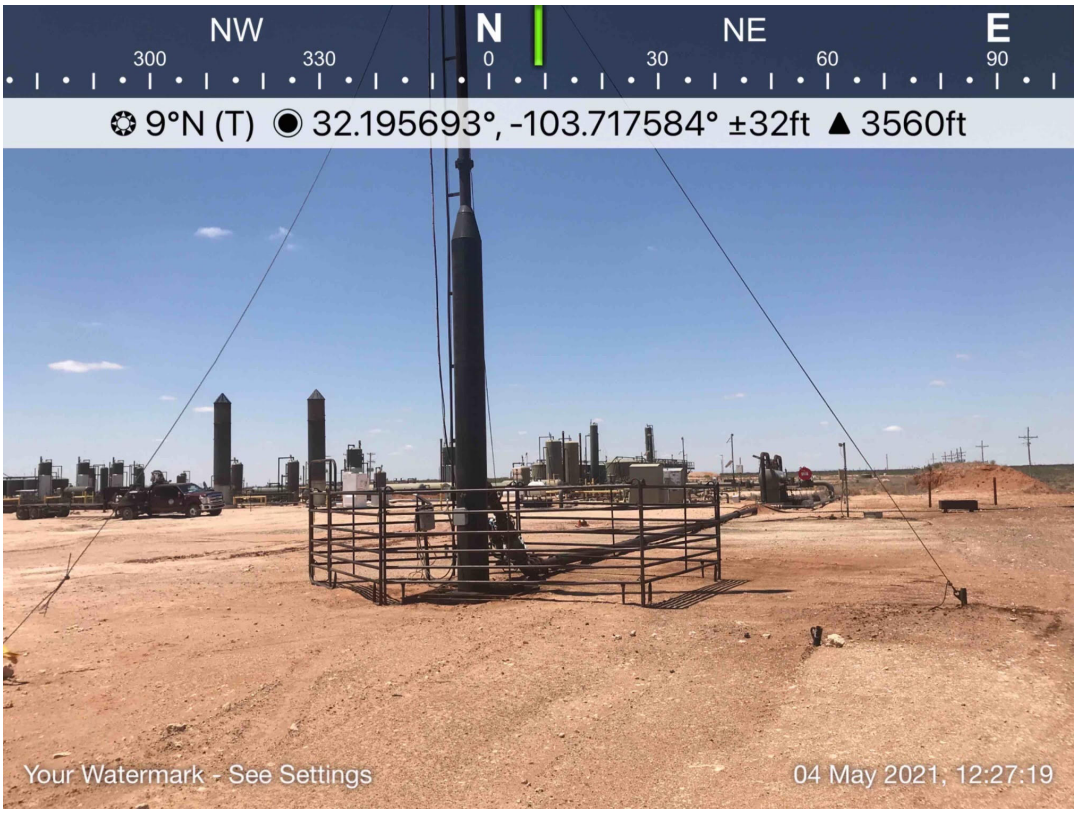
Web AppBuilder for ArcGIS
Maxar, Microsoft |

Table of Analytical Data

Table 1
COG Operating LLC.
King Tut CTB (4.3.21)-Analytical Data
Lea County, New Mexico

Sample ID	Sample Date	TPH (mg/kg)							Benzene (mg/kg)	Total BTEX (mg/kg)	Chloride (mg/kg)
		GRO	DRO	MRO	*Total*	GRO	DRO	*Total*			
Average Depth to Groundwater (ft) - 50-100' Low Karst											
NMOCD RAL Limits (mg/kg)		-	-	-	***1,000***	-	-	***2,500***	***10***	***50***	***10,000***
SP1	5/4/21	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00398	**130**

Photo


NW
N
NE
E
300
330
0
30
60
90
9°N (T) 32.195693°, -103.717584° ±32ft 3560ft
Your Watermark - See Settings
04 May 2021, 12:27:19

Appendix A

C-141

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

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Cause of Release		

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☐ The source of the release has been stopped.
☐ The impacted area has been secured to protect human health and the environment.
☐ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☐ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: Jacqui Harris _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☐ Description of remediation activities

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

Printed Name: _____ Title: _____

Signature: Jacqui Harris _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

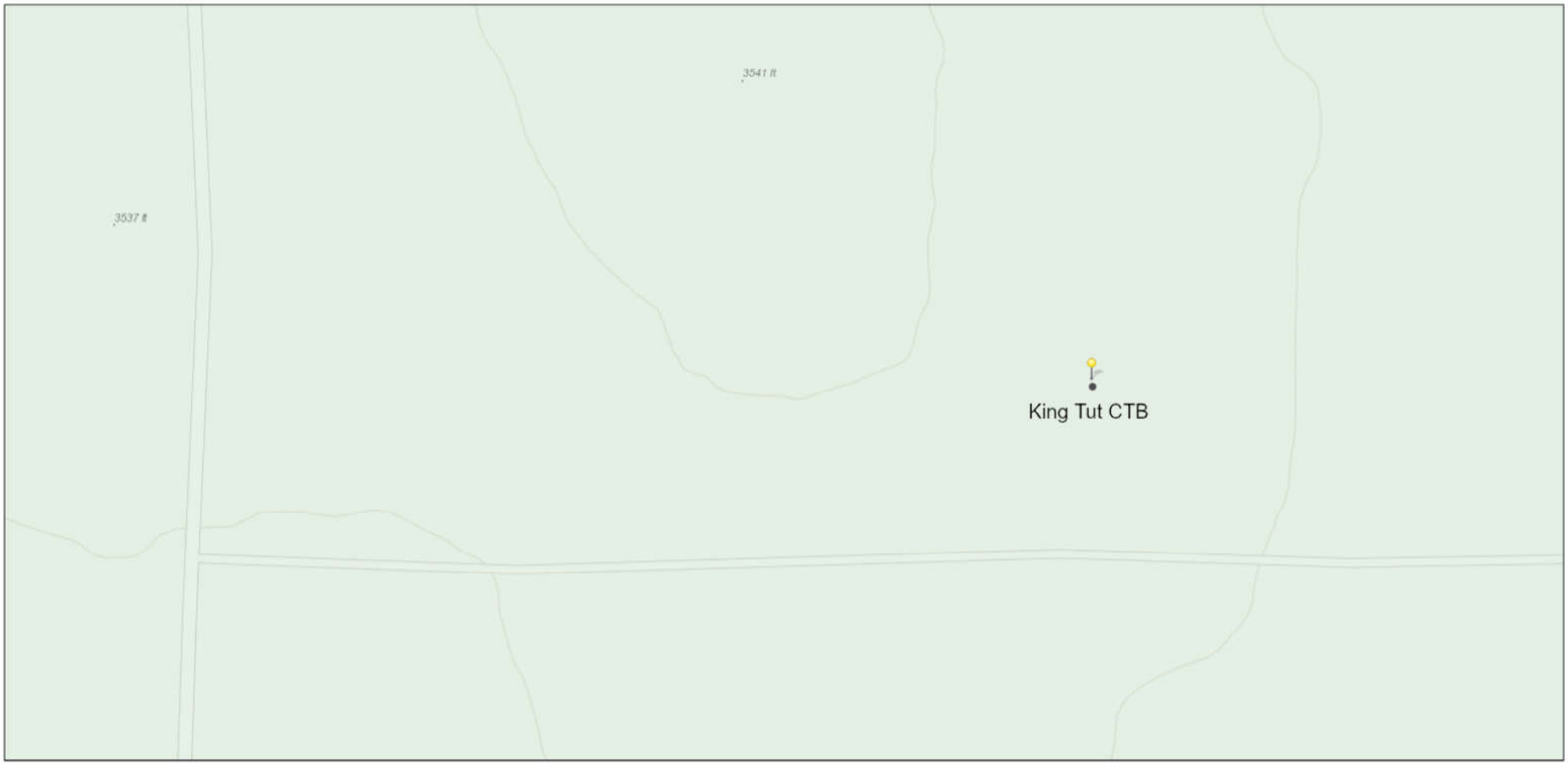
Closure Approved by: Chad Hensley _____ Date: _____

Printed Name: _____ Title: _____

Appendix B

Site Assessment Data

Karst Potential



7/9/2021, 10:01:23 AM

Karst Occurance Areas

- High
- Low
- Medium
- Mine Workings

1:2,257

0 0.02 0.04 0.09 mi

0 0.04 0.07 0.14 km

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

Web AppBuilder for ArcGIS

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA |

National Flood Hazard Layer FIRMette

FEMA

103°43'29"W 32°11'55"N

103°42'52"W 32°11'25"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/29/2021 at 3:57 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

King Tut CTB- GWD

7/9/2021, 9:56:13 AM

1:4,514

0 0.04 0.09 0.18 mi

0 0.05 0.1 0.2 km

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

Web AppBuilder for ArcGIS

Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA |

SCARBOROUGH DRILLING, INC.
TEST HOLES • WATER WELLS
P.O. Box 305 - Ph. 806-872-3285 or 872-9349
LAMESA, TEXAS 79331
2001 South Hwy. 87

WELL LOG

From	To	FORMATION
0	1	Caliche Pad
1	10	Brown Loose Sand
10	28	Brown Sand w/ caliche
28	43	Dense Caliche
43	55	Red Shale
		BH-1
		COG - King Tut
		Federal #1H
		Plugged w/ Hole Plug
		32.195562 -103.721798

Date 8-4-20 Driller Lee Scarborough

GIBBS PRINTING CO.-LAMESA, TX

Appendix C

Analytical Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Xenco, Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-660-1
Client Project/Site: King Tut Flare Fire

For:
ConocoPhillips Co.
1401 Commerce Drive
Carlsbad, New Mexico 882200

Attn: Jacqui Harris

JKramer

Authorized for release by:
5/14/2021 11:09:13 AM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: ConocoPhillips Co.
Project/Site: King Tut Flare Fire

Laboratory Job ID: 890-660-1

Table of Contents

Definitions/Glossary

Client: ConocoPhillips Co. Job ID: 890-660-1
Project/Site: King Tut Flare Fire

Qualifiers

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: ConocoPhillips Co.
Project/Site: King Tut Flare Fire

Job ID: 890-660-1

Job ID: 890-660-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-660-1

Receipt
The sample was received on 5/12/2021 2:58 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.6°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: SP1 (890-660-1).

GC VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: ConocoPhillips Co.
Job ID: 890-660-1
Project/Site: King Tut Flare Fire

Client Sample ID: SP1
Lab Sample ID: 890-660-1
Date Collected: 05/04/21 00:00
Matrix: Solid
Date Received: 05/12/21 14:58

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/13/21 14:00	05/13/21 16:38	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/13/21 14:00	05/13/21 16:38	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/13/21 14:00	05/13/21 16:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/13/21 14:00	05/13/21 16:38	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/13/21 14:00	05/13/21 16:38	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/13/21 14:00	05/13/21 16:38	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/13/21 14:00	05/13/21 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*05/13/21 14:00*	*05/13/21 16:38*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/13/21 14:00*	*05/13/21 16:38*	*1*

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/13/21 11:18	05/13/21 19:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/13/21 11:18	05/13/21 19:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/13/21 11:18	05/13/21 19:42	1
Total TPH	<49.9	U	49.9		mg/Kg		05/13/21 11:18	05/13/21 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*05/13/21 11:18*	*05/13/21 19:42*	*1*
o-Terphenyl	*108*		*70 - 130*	*05/13/21 11:18*	*05/13/21 19:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		5.03		mg/Kg			05/13/21 16:47	1

Surrogate Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Flare Fire

Job ID: 890-660-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-660-1	SP1	107	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-660-1	SP1	114	108
LCS 880-3064/2-A	Lab Control Sample	105	96
LCSD 880-3064/3-A	Lab Control Sample Dup	106	98
MB 880-3064/1-A	Method Blank	55 S1-	55 S1-

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Flare Fire

Job ID: 890-660-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-3064/1-A
Matrix: Solid
Analysis Batch: 3057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/13/21 11:18	05/13/21 11:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/13/21 11:18	05/13/21 11:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/13/21 11:18	05/13/21 11:47	1
Total TPH	<50.0	U	50.0		mg/Kg		05/13/21 11:18	05/13/21 11:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*55*	*S1-*	*70 - 130*	*05/13/21 11:18*	*05/13/21 11:47*	*1*
o-Terphenyl	*55*	*S1-*	*70 - 130*	*05/13/21 11:18*	*05/13/21 11:47*	*1*

Lab Sample ID: LCS 880-3064/2-A
Matrix: Solid
Analysis Batch: 3057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	877.8		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	952.0		mg/Kg		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: LCSD 880-3064/3-A
Matrix: Solid
Analysis Batch: 3057

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3064

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	864.6		mg/Kg		86	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	973.3		mg/Kg		97	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*106*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3070/1-A
Matrix: Solid
Analysis Batch: 3078

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			05/13/21 16:11	1

QC Sample Results

Client: ConocoPhillips Co.
Project/Site: King Tut Flare Fire

Job ID: 890-660-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-3070/2-A
Matrix: Solid
Analysis Batch: 3078

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	244.7		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-3070/3-A
Matrix: Solid
Analysis Batch: 3078

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	243.9		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Flare Fire

Job ID: 890-660-1

GC VOA

Analysis Batch: 3051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-660-1	SP1	Total/NA	Solid	8021B	3053

Prep Batch: 3053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-660-1	SP1	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 3057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-660-1	SP1	Total/NA	Solid	8015B NM	3064
MB 880-3064/1-A	Method Blank	Total/NA	Solid	8015B NM	3064
LCS 880-3064/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3064
LCSD 880-3064/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3064

Prep Batch: 3064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-660-1	SP1	Total/NA	Solid	8015NM Prep	
MB 880-3064/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3064/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3064/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-660-1	SP1	Soluble	Solid	DI Leach	
MB 880-3070/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3070/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3070/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 3078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-660-1	SP1	Soluble	Solid	300.0	3070
MB 880-3070/1-A	Method Blank	Soluble	Solid	300.0	3070
LCS 880-3070/2-A	Lab Control Sample	Soluble	Solid	300.0	3070
LCSD 880-3070/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3070

Lab Chronicle

Client: ConocoPhillips Co.
Job ID: 890-660-1
Project/Site: King Tut Flare Fire

Client Sample ID: SP1
Lab Sample ID: 890-660-1
Date Collected: 05/04/21 00:00
Matrix: Solid
Date Received: 05/12/21 14:58

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3053	05/13/21 14:00	MR	XM
Total/NA	Analysis	8021B		1	3051	05/13/21 16:38	MR	XM
Total/NA	Prep	8015NM Prep			3064	05/13/21 11:18	AM	XM
Total/NA	Analysis	8015B NM		1	3057	05/13/21 19:42	AJ	XM
Soluble	Leach	DI Leach			3070	05/13/21 14:00	SC	XM
Soluble	Analysis	300.0		1	3078	05/13/21 16:47	SC	XM

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: ConocoPhillips Co.
Job ID: 890-660-1
Project/Site: King Tut Flare Fire

Laboratory: Eurofins Xenco, Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015B NM	8015NM Prep	Solid	Total TPH
8021B	5035	Solid	Total BTEX

Method Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Flare Fire

Job ID: 890-660-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XM
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	XM
300.0	Anions, Ion Chromatography	MCAWW	XM
5035	Closed System Purge and Trap	SW846	XM
8015NM Prep	Microextraction	SW846	XM
DI Leach	Deionized Water Leaching Procedure	ASTM	XM

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

XM = Eurofins Xenco, Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: ConocoPhillips Co.
Project/Site: King Tut Flare Fire

Job ID: 890-660-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-660-1	SP1	Solid	05/04/21 00:00	05/12/21 14:58	

Analysis Request of Chain of Custody Record

Page 1 of 1

5/14/2021

CONCHO

One Concho Center/600/Illinois Avenue/Midland, Texas

Tel (432) 683-7443

Client Name: COG	Site Manager: Jacqui Harris
Project Name: King Tut Flare Five	
Project Location: (County, state)	Project #:
Invoice to: Jacqui Harris	
Receiving Laboratory:	Sampler Name: Jacqui Harris
Comments:	

ANALYSIS REQUEST

(Circle or Specify Method No.)

890-660 Chain of Custody

LAB # (LAB USE ONLY)	SAMPLE IDENTIFICATION	SAMPLING YEAR: DATE	SAMPLING TIME	MATRIX WATER	MATRIX SOIL	PRESERVATIVE METHOD HCL	PRESERVATIVE METHOD HNO_3	PRESERVATIVE METHOD ICE	# CONTAINERS	(C)omposite/(G)rab	TPH 8015M (GRO - DRO - MRO)	BTEX 8021B	Chloride	Hold
	Sp 1	5/12/21			X			X			X	X	X	

Page 14 of 16

Relinquished by: Jacqui Harris	Date: 5/12/21	Time: 14:58	Received by: [signature] 5.12.21 1458
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

LAB USE ONLY

Sample Temperature 1.8 / 1.6

REMARKS:

- RUSH: Same Day 24 hr (48 hr) 72 hr
- Rush Charges Authorized
- Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ORIGINAL COPY

Login Sample Receipt Checklist

Client: ConocoPhillips Co. Job Number: 890-660-1

Login Number: 660 **List Source: Eurofins Carlsbad**
List Number: 1
Creator: Clifton, Cloe

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: ConocoPhillips Co. Job Number: 890-660-1

Login Number: 660 **List Source: Eurofins Midland**
List Number: 2 **List Creation: 05/13/21 02:09 PM**
Creator: Copeland, Tatiana

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 35952

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 35952
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	8/17/2021