



RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

May 13, 2021

Mr. Heath Melton
Bridgeland Development, LP
23720 House Hahl Road
Cypress, TX 77433

RE: ***Certificate of Completion***
0.6811-Acres of Land
Former Josey Ranch Well 6-18/Bridgeland Well Site T-13
Cypress, Harris County, Texas
Voluntary Cleanup Number No. 03-20007

Dear Mr. Melton:

Staff of the Railroad Commission of Texas (RRC) Voluntary Cleanup Program (VCP) is pleased to provide the enclosed Certificate of Completion for the Former Josey Ranch Well 6-18/Bridgeland Well Site T-13 (Site) in Cypress, Harris County, Texas. The Site is approximately 0.6811 acres within the Bridgeland Parkland Village Section 50. The following reports prepared by Terracon Consultants, Inc. on behalf of Bridgeland Development, LP were reviewed:

- *Phase I Environmental Site Assessment, dated June 12, 2012*
- *Limited Site Investigation, dated November 4, 2019*
- *Limited Site Investigation, January 17, 2020*
- *Supplemental Site Investigation and Soil Excavation, dated October 21, 2020*
- *Supplemental Site Investigation, dated February 22, 2021*
- *Phase I Environmental Site Assessment, dated March 1, 2021*
- *Groundwater Monitoring Report, dated April 8, 2021*

Site History

The Site is the undeveloped acreage associated with the Bridgeland, a master-planned residential development. Based on a review of the historical information, the Site has been mostly undeveloped land since at least the 1910s. Features associated with agricultural development were prevalent on aerial photographs from the 1950s and 1960s, and oil/gas exploration and production commenced on-site in the 1970s. Since the 1970s, the Site appears to have been primarily used for ranching and oil/gas production. The Bridgeland master-planned residential development adjacent to the Site began in the early 2000s.

An initial Phase I Environmental Site Assessment (ESA) was conducted in 2012 by Terracon. The ESA identified a tank battery, a gas well, and production equipment on the property, which are

considered to be Recognized Environmental Conditions (RECs). Due to the age of the initial Phase I ESA, an update was performed in 2021 and no new RECs were identified at the Site.

Site Investigation

In October 2019, Terracon performed a limited site investigation to assess the identified RECs at the Site. Four shallow soil borings (15 feet below ground surface (bgs)) and six deep soil borings (20 to 30 feet bgs) were installed at the Site. The six deep borings were converted into temporary monitor wells. Soil and groundwater samples were collected and analyzed for total petroleum hydrocarbon (TPH), benzene, toluene, ethylbenzene, and xylenes (BTEX), as well as RCRA-8 metals and chloride. Results of the sampling event showed concentrations of TPH and benzene above the Tier 1 residential soil-to-groundwater protective concentration levels (PCLs) in TSP-4 at 4-6 feet bgs and at 10-12 feet bgs. TSP-4 is located approximately 30 feet west of the plugged gas well on the property. Sampling results also showed concentrations of barium and lead above the Tier 1 residential soil-to-groundwater PCLs in B-4 at 3-5 feet bgs. However, concentrations of both metals in B-4 at 5-7 feet were below PCLs, indicating the contamination was vertically delineated. B-4 is located approximately 30 feet north of the plugged gas well on the property. A groundwater sample collected from TSP-4 showed concentrations of TPH and benzene above the Tier 1 residential ingestion PCLs. A groundwater sample collected from TSP-2, located within the production equipment area, also showed a concentration of TPH above the Tier 1 residential ingestion PCL. Concentrations of arsenic and chromium in groundwater samples collected from TSP-2 and TSP-3 were above the Tier 1 ingestion PCLs. TSP-3 is located along an historic flowline connecting the gas well to the production equipment. Additionally, concentrations of lead in TSP-2, TSP-3, and TSP-4 were above the Tier 1 ingestion PCL. Groundwater samples from TSP-2, TSP-3, and TSP-4 were filtered using a 10-micron filter and reanalyzed for arsenic, chromium, and lead. Concentrations of these metals in the filtered samples were below the Tier 1 residential ingestion PCLs.

In January 2020, additional soil borings and temporary monitor wells were installed along the eastern property boundary. Soil and groundwater samples were analyzed for TPH, BTEX, metals, and chloride. None of the soil samples showed concentrations of constituents above the Tier 1 residential soil-to-groundwater PCLs. However, results of the groundwater analysis showed concentrations of arsenic (TSP-7, TSP -9, TSP-10, and TSP-11), barium (TSP-7, TSP -9, and TSP-11), cadmium (TSP-9), chromium (TSP-7, TSP -9, and TSP-11), and lead (TSP-7, TSP -9, and TSP-11) above the Tier 1 residential ingestion PCLs. These samples were filtered and reanalyzed. The results of the filtered analysis only showed elevated concentrations of arsenic, chromium, and lead in TSP-9, which is located upgradient and more than 60 feet east of any REC at the Site.

In June 2020, five permanent monitor wells were installed at the Site. Soil and groundwater samples were collected and analyzed for TPH, BTEX, metals, and chloride. Results of the soil analysis showed that barium was above the Tier 1 residential soil-to-groundwater PCL in MW-5 at 5-6 feet bgs and above the Tier 1 total soil combined PCL in MW-5 at 6-7 feet bgs. Monitor well MW-5 is located in the same location as the plugged gas well. Concentrations of all other constituents were either below the sample detection limits or the soil-to-groundwater PCLs. Groundwater analytical results from the permanent monitor wells showed that TPH was in exceedance of the Tier 1 residential ingestion PCL in MW-1 and MW-2. Monitor well MW-1 was

Mr. Health Melton

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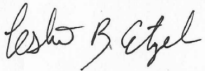
installed just south of the tank battery footprint and MW-2 was installed in the same location as TSP-2 and the production equipment.

Due to the elevated concentration of barium, a 22 by 18-foot area immediately surrounding MW-5 was excavated to a depth of 10 feet. The initial 3 feet of excavated soils were stockpiled on site in one location and the additional excavated soils from 3 feet bgs to 10 feet bgs were also stockpiled on site in another location. Soil confirmation samples were collected from each sidewall and the floor of the excavated area. Analysis of the confirmation samples indicated that concentrations of barium were all below the soil-to-groundwater PCL. The excavated area was backfilled with a mixture of clean fill material and stockpiled soils.

Following well installation, four groundwater gauging and sampling events were performed on the permanent monitor wells at the Site. Groundwater was analyzed for TPH, BTEX, metals, and chloride. Concentrations of BTEX, metals, and chloride were below the applicable PCLs in all wells during all four sampling events. TPH concentrations in MW-1 and MW-2 had decreased below the calculated site-specific TPH mixture PCL of 2.74 milligrams per liter during the second sampling event and were below the detection limits during the next two events.

Based on the information provided, the Site appears to be protective of unrestricted use. On behalf of the RRC, staff of the Site Remediation Section thank you for your participation in the VCP. Should you have any questions, I can be reached at 512-463-3384 or leslie.bruce@rrc.texas.gov.

Sincerely,



Leslie Bruce Etzel
VCP Coordinator
Site Remediation Section

CC: Prasad Rajulu, Terracon (via email)

**VOLUNTARY CLEANUP PROGRAM
FINAL CERTIFICATE OF COMPLETION
WITHOUT RESTRICTIONS**

As provided for Chapter 91, Subchapter 0, Texas Natural Resource Code.

I, PETER G. POPE, ASSISTANT DIRECTOR OF THE SITE REMEDIATION SECTION, OIL AND GAS DIVISION, RAILROAD COMMISSION OF TEXAS, CERTIFY UNDER CHAPTER 91, SUBCHAPTER 0, TEXAS NATURAL RESOURCE CODE, THAT NECESSARY RESPONSE ACTIONS HAVE BEEN COMPLETED FOR VOLUNTARY CLEANUP PROGRAM SITE VCP NO. 03-20007 FOR THE TRACT OF LAND DESCRIBED IN EXHIBIT "A", BASED ON THE AFFIDAVIT OF COMPLETION OF RESPONSE ACTION, EXHIBIT "B" AND WHICH ARE FURTHER DESCRIBED IN THE APPROVED FINAL REPORT FOR THE SITE. THE APPLICANT WAS NOT A RESPONSIBLE PARTY UNDER SECTION 91.113. ON THE DATE OF ISSUANCE OF THIS CERTIFICATE THE APPLICANT IS QUALIFIED TO OBTAIN THE PROTECTION FROM LIABILITY PROVIDED BY CHAPTER 91, SUBCHAPTER 0, TEXAS NATURAL RESOURCE CODE.

EXECUTED on 13 May 2021



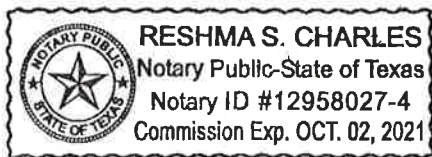
*Peter G. Pope, Assistant Director
Site Remediation Section*

STATE OF Texas

COUNTY OF Travis

BEFORE ME, personally appeared Peter G. Pope, Assistant Director, Site Remediation Section, of the Railroad Commission of Texas, known to me to be the person and agent of said commission whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 13th Day of May 2021.



Notary without Bond



Notary Public in and for the State of Texas

EXHIBIT "A"
RAILROAD COMMISSION OF TEXAS
VOLUNTARY CLEANUP PROGRAM
LEGAL DESCRIPTION 0.6811-ACRE TRACT

VCP No. 03-20007

DESCRIPTION OF A 0.6811 ACRE TRACT OF LAND SITUATED
IN THE W.C. DAVIS SURVEY, ABSTRACT NO. 1391
HARRIS COUNTY, TEXAS

BEING a 0.6811 acre (29,671 square foot) tract of land situated in the W.C. Davis Survey, Abstract No. 1391 of Harris County, Texas and being all of Lots 2, 3 and 4 and all of Restricted Reserve "D", Block 1 of BRIDGELAND PARKLAND VILLAGE SEC 50, a subdivision per plat recorded under Film Code Number (F.C. No.) 693540 of the Harris County Map Records (H.C.M.R.), said 0.6811 acre tract of land described by metes and bounds as follows, with all bearings based on the Texas Coordinate System of 1983 (NAD83), South Central Zone 4204 and referenced to monuments found along the East line of Thirsty Horse Trail as cited herein and as shown on a survey plat of even date prepared by the undersigned in conjunction with this metes and bounds description:

BEGINNING at a 1/2-inch iron rod with cap stamped "BGE INC" found for the Northwest corner of said Lot 2 and the herein described tract, same being the Southwest corner of Lot 1 of said Block 1, lying on the East right-of-way line of Thirsty Horse Trail (width varies) as shown on said BRIDGELAND PARKLAND VILLAGE SEC 50;

THENCE, EAST, a distance of 127.49 feet along and with the common line of said Lot 1 and said Lot 2 to a 1/2-inch iron rod with cap stamped "BGE INC" found for the Northeast corner of said Lot 2 and the herein described tract, same being the Southeast corner of said Lot 1, lying on the West line of Lot 24, Block 1 of BRIDGELAND PARKLAND VILLAGE SEC 37, a subdivision per plat recorded under F.C. No. 691499 of the H.C.M.R.;

THENCE, SOUTH, a distance of 60.00 feet along and with the East line of said Lot 2, same being the West lines of said Lot 24 and Lot 23, Block 1 of said BRIDGELAND PARKLAND VILLAGE SEC 37 to a 5/8-inch iron rod with cap stamped "Costello" found for the Southeast corner of said Lot 2 and the Southwest corner of said Lot 23, same being an interior corner of the herein described tract, lying on the North line of said Lot 3;

THENCE, EAST, a distance of 20.83 feet along and with the common line of said Lot 3 and said Lot 23 to a 5/8-inch iron rod found for the Northeast corner of said Lot 3, same being the Northwest corner of said Lot 22, Block 1 of BRIDGELAND PARKLAND VILLAGE SEC 37;

THENCE, SOUTH, a distance of 148.47 feet along and with the East lines of said Lot 3, said Restricted Reserve "D" and said Lot 4, same being the West lines of Lots 20-22 of said Block 1 of said BRIDGELAND PARKLAND VILLAGE SEC 37 to a 1/2-inch iron rod with cap stamped "BGE INC" found for the Southeast corner of said Lot 4 and the herein described tract, same being the Northeast corner of Lot 5 of said Block 1;

THENCE, WEST, a distance of 148.32 feet along and with the common line of said Lot 4 and said Lot 5 to a 1/2-inch iron rod with cap stamped "BGE INC" found for the Southwest corner of said Lot 4 and the herein described tract, same being the Northwest corner of said Lot 5, lying on the East right-of-way line of said Thirsty Horse Trail;

BRIDGELAND PARKLAND VILLAGE SEC 50
0.6811 OF ONE ACRE

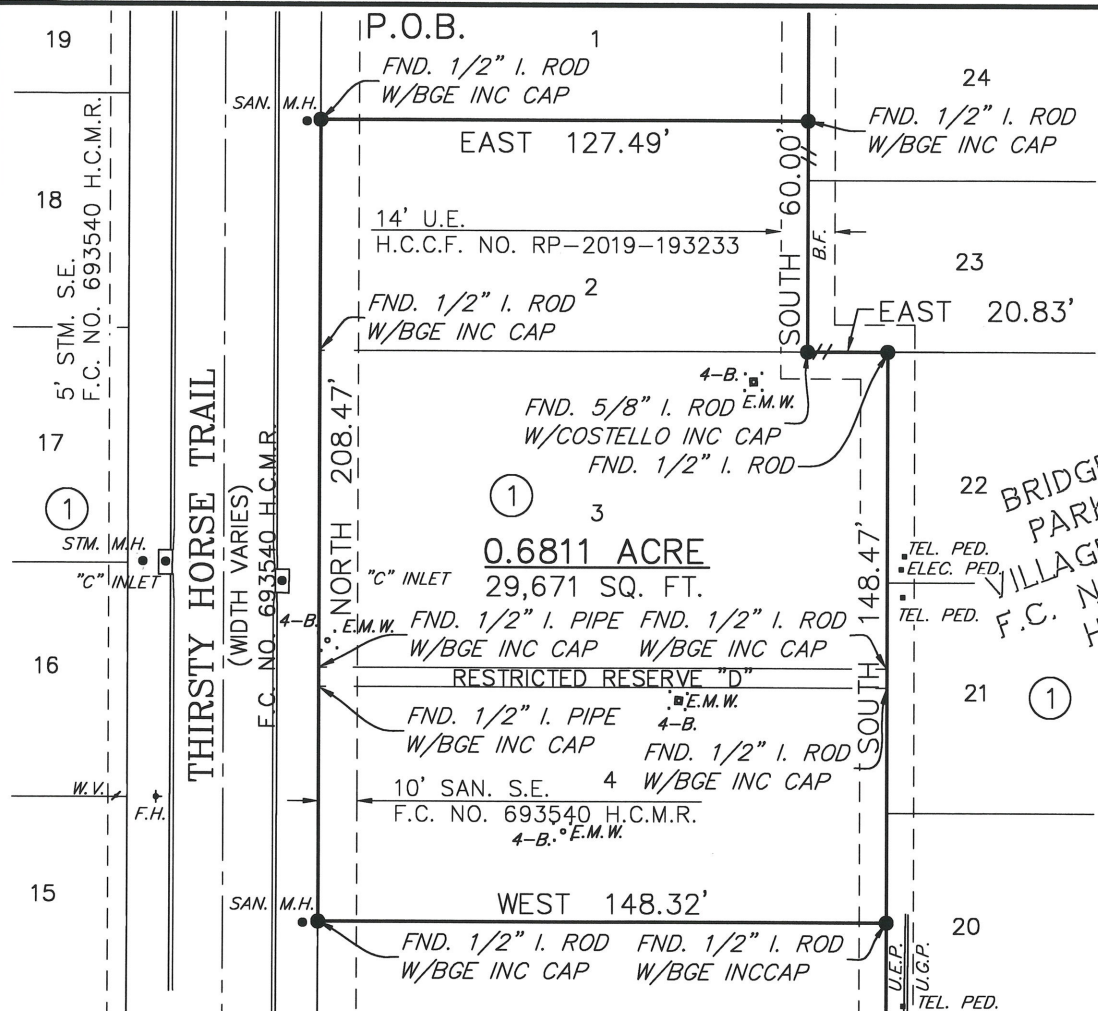
FEBRUARY 11, 2021
JOB NO. 623-21

THENCE, NORTH, a distance of 208.47 feet along and with said East right-of-way line to the **POINT OF BEGINNING** and containing 0.6811 of one acre (29,671 square feet) of land.

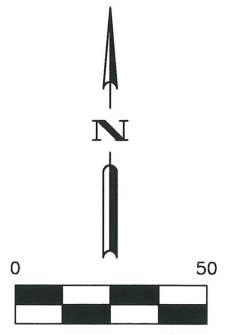


A handwritten signature in blue ink that reads "Alan C. Bentley".

Alan C. Bentley RPLS No. 2055
BGE, Inc.
10777 Westheimer Road, Suite 400
Houston, Texas 77042
Telephone: (281) 558-8700
TBPLS Licensed Surveying Firm No. 10106500



- LEGEND**
- 4-B. 4 BOLLARDS
 - E.M.W. ENVIRONMENTAL MONITOR WELL
 - F.C. FILM CODE
 - FND. FOUND
 - H.C.C.F. HARRIS COUNTY CLERK'S FILE
 - H.C.M.R. HARRIS COUNTY MAP RECORDS
 - I. IRON
 - NO. NUMBER
 - P.O.B. POINT OF BEGINNING
 - R.O.W. RIGHT-OF-WAY
 - S.E. SEWER EASEMENT
 - SQ. FT. SQUARE FEET
 - STM. STORM
 - U.E. UTILITY EASEMENT



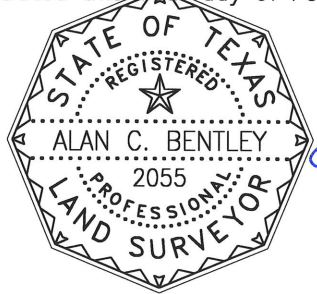
BRIDGELAND
 PARKLAND
 VILLAGE SEC 37
 F.C. NO. 691499
 H.C.M.R.

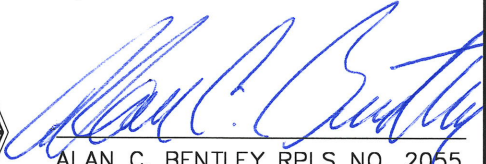
1. BEARING ORIENTATION IS BASED ON THE TEXAS COORDINATE SYSTEM OF 1983 (NAD83), SOUTH CENTRAL ZONE 4204 AND REFERENCED TO MONUMENTS FOUND ALONG THE EAST RIGHT-OF-WAY LINE OF THIRSTY HORSE TRAIL ROAD AS SHOWN HEREON.
2. THE PROPERTY LIES IN UNSHADED ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN)-BASE FLOOD ELEVATIONS DETERMINED) AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR HARRIS COUNTY, TEXAS AND INCORPORATED AREAS, MAP NUMBER 48201C0415 N, REVISED NOVEMBER 15, 2019.
3. THE SQUARE FOOTAGE VALUE SHOWN HEREON IS A MATHEMATICAL VALUE CALCULATED FROM THE BOUNDARY DATA SHOWN HEREON. THIS VALUE IN NO WAY REPRESENTS THE PRECISION OF CLOSURE OF THIS SURVEY OR THE ACCURACY OF CORNER MONUMENTS FOUND OR PLACED.
4. NO TITLE COMMITMENT WAS PROVIDED AND THE SURVEYOR DID NOT ABSTRACT THE PROPERTY FOR RECORD INSTRUMENTS THAT MAY AFFECT, RESTRICT, OR OTHERWISE ENCUMBER SUBJECT TRACT.

BRIDGELAND PARKLAND
 VILLAGE SEC 50
 F.C. NO. 693540
 H.C.M.R.

5 I, Alan C. Bentley, a Registered Professional Land Surveyor of the State of Texas do hereby certify that this survey substantially complies with the minimum technical standards as promulgated by the Texas Board of Professional Engineers and Land Surveyors.

Dated this 10th day of February, 2021.




 ALAN C. BENTLEY RPLS NO. 2055
 BGE, INC.
 10777 WESTHEIMER, SUITE 400
 HOUSTON, TEXAS 77042
 TELEPHONE: (281) 558-8700


 BGE, Inc. 10777 Westheimer, Suite 400, Houston, TX 77042 Tel: 281-558-8700 • www.bgeinc.com TBPLS Licensed Surveying Firm No. 10106500		Copyright 2021	
STANDARD LAND SURVEY OF A 0.6811 ACRE TRACT SITAUTED IN THE W.C. DAVIS SURVEY, ABSTRACT NO. 1391 HARRIS COUNTY, TEXAS			
Scale:	Job No.:	Date:	Drawing:
1"=50'	623-21	02/11/2021	1 OF 1

EXHIBIT "B"
RAILROAD COMMISSION OF TEXAS
VOLUNTARY CLEANUP PROGRAM
AFFIDAVIT OF COMPLETION

VCP No. 03-20007

EXHIBIT "B"

**RAILROAD COMMISSION OF TEXAS
VOLUNTARY CLEANUP PROGRAM
AFFIDAVIT OF COMPLETION OF RESPONSE ACTION**

I, Heath Melton, representing Bridgeland Development, LP, have completed the necessary response actions, pursuant to Chapter 91, Subchapter O, Texas Natural Resource Code, at the approximately 0.68-Acre tract of land described in Exhibit "A" (Site) of this certificate pertaining to Voluntary Cleanup Program (VCP) No. 03-20007 located in Harris County, Texas. The applicant has submitted and received approval from the Railroad Commission of Texas (RRC) on all plans and reports required by the Voluntary Cleanup Agreement. The plans and reports were prepared using a prudent degree of inquiry of the Site consistent with accepted industry standards to identify all contaminants, waste and contaminated media of regulatory concern. The response actions for the site have achieved response action levels as determined by the standards of the RRC and remain protective.

The response actions eliminate substantial present or future risk to public health and safety and to the environment from releases and threatened releases of contaminants at or from the Site. The Applicant has not acquired this certificate of completion by fraud, misrepresentation, or knowing failure to disclose material information. Further information concerning the response actions at this Site may be found in the final report at the central office of the RRC filed under VCP No.03-20007.

The preceding is true and correct to the best of my knowledge and belief.

Applicant

By: 

Print Name: Heath Melton

STATE OF TEXAS
COUNTY OF Harris

BEFORE ME, personally appeared Heath Melton,
known to me to be the person and agent of said commission whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same for the purposes and in the capacity therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 13 day of April 2021.

Notary Public in and for the State of Texas



